



# HProImmune

Promotion of Immunization for Health Professionals in Europe



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[www.hproimmune.eu](http://www.hproimmune.eu)

## The Project

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The Institute of Preventive Medicine Environmental and Occupational Health, Prolepsis, is coordinating a new 3-year European project, which officially started on September 1, 2011. HProImmune is co-funded by the DG SANCO Public Health Program 2008-2013.

The project will add to the knowledge on barriers concerning Health Care Workers (HCWs) immunization and develop educational material for health professionals in both the private and the public sector, as well as propose recommendations for policy-makers.



## Project update

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Over the last year the HProImmune partners were involved in many activities which resulted in a number of important achievements. The most important are listed below:

1. In depth exploration of vaccine related behaviors of Health Care professionals including the barriers and enablers towards immunization. This was achieved through focus groups and an on line survey.
2. Identification of best practices in the area of HCPs immunizations
3. European workshop titled: Immunization of Healthcare Workers: Does anything work?

The HPROIMMUNE Project has received funding from the European Union / DG Health and Consumer Protection.



Executive  
Agency for  
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1

## Barriers and enablers of Health Care Workers towards immunization

### Focus groups

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Focus Groups were organized in the seven countries comprising the HProImmune consortium – Greece, Cyprus, Poland, Italy, Lithuania, Germany, and Romania.

The aim of the focus groups was to investigate views, needs, barriers (organizational and attitudinal) as well as enablers (cues for action) of HCWs as a way of guiding the development of the HProImmune toolkit.

Focus groups were conducted with Nurses, Physicians, Administration & Infection Control personnel, Policy Makers & Public Health Personnel. We confirmed that HCWs are a high risk group for getting infected with vaccine preventable diseases. Hepatitis B is considered the most important vaccine preventable disease given the risks mainly from needle injuries. Findings also suggest that HCWs do not often realize that the influenza virus can be transmitted to patients and other colleagues by both symptomatic and asymptomatic healthcare staff.

The focus group results indicated lack of knowledge or insufficient and incorrect knowledge and lack of evidence based information about the benefits of vaccinations. This finding was more obvious among young public health professionals. There was also a lack of information and knowledge about the booster vaccines schedule while many HCPs did not think they had a moral duty to accept vaccinations. In addition the people who participated in the focus groups mentioned that they did not feel they had a moral duty to accept vaccination while the physicians we talked to did not recommend vaccination to their patients. There was a widespread belief among participants that immunization is not a personal responsibility but rather an issue to be taken up by the health



care system. In addition participants mentioned a number of organizational and institutional barriers to vaccination which included:

- *Busy schedules;*
- *Cost of vaccinations;*
- *The current policy of voluntary vaccination of healthcare workers;*
- *Lack of a general preventive culture/organizational prevention strategies;*
- *Lack of commitment from authorities;*
- *Different immunization schedules among EU countries*
- *Absence of an epidemiology expert in hospitals;*

Finally, participants mentioned the existence of an anti-vaccination movement after the experience of the H1N1 pandemic in 2009 while the lack of a consistent organizational infrastructure and clinical practice in hospitals to establish relevant regulations was also considered an important obstacle.



## Survey

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A survey was developed in order to explore barriers and enablers to vaccination in the countries not represented in the consortium. The survey is available on line and can be accessed from the HProImmune website [www.hproimmune.eu](http://www.hproimmune.eu).

Analysis was performed on 5165 completed questionnaires by health care workers from 36 countries. The main findings are listed below:

- The vast majority of respondents believe that vaccines are important for reducing or eliminating serious diseases (86.1%), while only 7.1% feels that vaccines are useful in particular settings, 2.4% prefers challenging natural immunity by contracting the disease rather than getting vaccinated, 2.4% do not believe in vaccines and considers vaccinations harmful and 2.1% is not sure about the role of vaccinations.

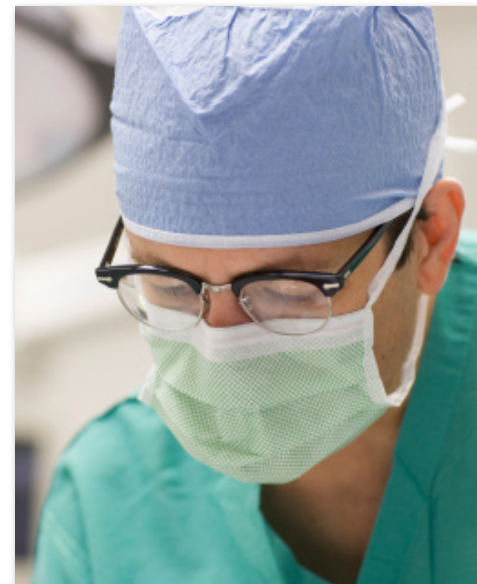
- In Slovenia however the majority (55.6%) of the respondents believe vaccinations do more harm than good.
- Respondents declared that Influenza (86.4%), Hepatitis B (71.9%) and Tuberculosis (59.1%) are among the diseases that are more at risk of being contracted at their work.
- The majority of health care workers from all countries do not need to prove immunity against vaccine preventable diseases except Germany, Italy, Malta, Slovenia and UK.
- The majority of the respondents (more than 77.8%) in Sweden, Greece, Slovenia, Spain, Poland, UK and Cyprus are not required to receive the seasonal influenza vaccine. The corresponding percentages for the health care workers from Finland, Italy, Malta and Lithuania are lower (between 53.5% and 63.0%). Most of the respondents from Germany (51.9%) and Romania (62.8%) do have to receive the seasonal influenza vaccine every year.
- Most of the health care workers in public tertiary or university hospital (73.4%), academia (76.4%), industry (74.5%) and other settings (76.2%) are not required to receive the seasonal influenza vaccine every year. The frequency of such vaccination of the health care workers in all the other work sectors is higher; however, they are still less than 50%.
- Hepatitis B, Td or Tdap and seasonal influenza flu are among the most frequent vaccines that the respondents have received the last 10 years
- UK and Finland have the highest percentage of respondents who have received seasonal influenza vaccines (83.5% and 80.6% respectively) the last 10 years. The corresponding percentages for Poland, Malta and Romania are 76.8%, 75.0% and 72.2%. It turns out that respondents from Spain (63.6%), Germany (59.3%), Lithuania (55.9%), Italy (54.0%) and Greece (52.5%) have received less frequently such vaccination. The majority of the health care workers from Sweden, Cyprus and Slovenia have not received the seasonal influenza vaccination.
- Medical doctors have received more frequently the seasonal influenza vaccine (76.7%) than nurses (62.0%) and allied health professionals (56.3%).
- In terms of setting of work those working in public health hospitals, long term care facilities and public health institutes have lower probability of not believing in vaccination. On the other hand, those working in academia and industry seem to not believe in vaccination in higher percentages.

2

## Best practices for the Immunization of Health Care Workers

A methodology for evaluating interventions was devised by the Cyprus International Institute for Environmental and Public Health in association with Harvard School of Public Health, Cyprus University of Technology (CII) in Limassol, Cyprus. This process produced a comprehensive list of best practice recommendations which can be used for increasing immunization rates among HCW. In particular the following recommendations for best practice we made:

- A successful vaccination program for HCW will protect the health care personnel, their colleagues, patients, and family as well as the wider community. Although a vaccination program requires money and resources in the form of educational material and vaccine supplies, they can result in cost savings due to the reduced absenteeism at work and an improvement in productivity. Research suggests that, despite long-lasting recommendations, vaccine uptake among HCW remains low. Therefore, the need to design vaccination programs based on models that have shown to be successful is warranted.
- Interventions are most effective when several approaches are used and programs designed are sustainable over time.
- A needs assessment performed before the design of the program enables the healthcare setting to target specific barriers and needs among their HCW population and thus increase the effectiveness of the program.
- A process and outcome evaluation will help in improving the program over time and be able to make comparisons over time.
- Evidence also shows that voluntary vaccinations have not been effective in reaching acceptable vaccination rates among HCW.
- Multifaceted and mandatory vaccination programs have been found to be the single most effective strategy in increasing HCW vaccination rates.



**3**

**European workshop titled:**

**Immunization of Healthcare Workers: *Does anything work?***

The HProImmune EU workshop was organized in Athens, Greece on the 25th and 26th of April 2013. The goal of the European Workshop on Best Practices for the Immunization of Health Professionals was to discuss and exchange expertise, information and best practices, as well as recommendations for the promotion of immunizations among health professionals by bringing together experts from various sectors: infectious diseases, vaccinology, health communication, infection control and health policy making. The workshop invited experts from WHO-Europe, the ECDC, the European Commission, the Hellenic CDC as well as representatives from the National Health System in the UK, and Romania, the Ministry of Health in Israel and the National Board of Health and Welfare in Sweden and the University of Stirling. Together with the HProImmune partner's consortium and the Advisory Board lively discussions took place concerning the barriers and enablers towards the vaccination of HCWs. Participants exchanged valuable experience from similar activities. The conclusions of the workshop will greatly contribute to the development of the project toolkits.

Following the workshop, the HProImmune partners had their 3rd meeting. The main aim of the meeting was to discuss the workshop outcomes and the implications for the development of the toolkit.



**Future activities**

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The HproImmune consortium is currently developing the toolkit which will be pilot tested between November 2013 and March 2014.



## Partnership

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### ● Main Partner:

- Institute of Preventive Medicine, Environmental and Occupational Health, Prolepsis, Greece

### ● Associated Partners:

- National Institute of Infectious Diseases Prof Dr Matei Bals - Romania
- Nofer Institute of Occupational Medicine - Poland
- Mokymų Tyrimų ir Vystymo Centras Lithuania
- Istituto Superiore Di Sanità - Italy
- Fundatia Romtens - Romania
- Cyprus University of Technology Cyprus
- Technische Universität Dresden Germany
- National Hellenic Nurses Association - Greece
- Hellenic Center for Disease Control and Prevention - Greece



### ● Collaborating Partners:

- Occupational Health (OCH) WHO/EURO Centre for Environment and Health Germany
- Health Protection Agency, Centre for Infectious Diseases - UK

## Contact Details

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