



SPECIAL REPORT

INNOVATIONS IN EU PANDEMIC PREPAREDNESS

Presented at the IV Joint EC/ECDC/WHO Workshop
on Pandemic Influenza Preparedness

Luxembourg, 25–27 September 2007



INTRODUCTION

Throughout history, people around the globe have constantly been confronted with new and evolving health threats. A particular threat to global health is that posed from pandemic influenza, which occurs when a strain of influenza virus emerges, that has enhanced capabilities to transmit between people and causes many to fall ill within a short period of time. For some, the threat may appear distant, but it is known that during the 20th Century three such strains of influenza have appeared, the worst of which, the ‘Spanish influenza’ in 1918-, was estimated to be responsible for between 20–40 million deaths globally. No one can be sure when such a change will occur, but experience and evidence suggests that it is a question of when, and not if, the next pandemic will emerge. For this reason, it is important that governments and society as a whole make preparations to contain and minimise the impact of pandemic influenza.

As part of the ongoing pandemic preparedness planning activities in the European Union (EU), in September 2007 experts from the 27 EU Member

States and other countries of the World Health Organization’s (WHO) European region gathered in Luxembourg to exchange experiences and information on new developments regarding Pandemic Influenza Preparedness. The workshop was organised and led by the Health & Consumer Protection Directorate- General of the European Commission (DG SANCO), supported by its organising partners the European Centre for Disease Prevention and Control (ECDC) and WHO’s Regional Office for Europe.

In the opening session, the representatives of the host organisations outlined the main challenges for the next two years, emphasising the importance of sustaining a high level of preparedness in the Member States to guarantee a clear and complete course of action in the event of a pandemic, but also to keep improving the existing national plans. Zsuzsanna Jakab, ECDC Director, stressed that the next phase would be to integrate and expand health sector preparedness plans across the whole of government. Compatibility amongst the individual plans must also be ensured to guarantee an efficient response in cross-border regions and throughout the EU as a whole.

PROGRESS ACHIEVED TO DATE

While there is still work to be done in order that EU citizens fully reap the benefits of the planning and preparations that have already taken place, a large amount of investment in both time and resources had been focused in the preparation against an influenza pandemic in the last 2–3 years. A particular focus of the workshop was therefore the sharing of good practices, innovations and developments at regional, national and EU level, with the objective of allowing participants to learn from each other and to further optimise and improve existing response plans across Europe.

Some of the results of this innovative work were presented in dedicated film and poster sessions that were held outside the meeting rooms and that ran for the duration of the workshop. Many Member States took the opportunity to showcase work in these sessions, and only some of this work is highlighted below. The total contributions also represent just a small snapshot of the large volume of work that the EU as a whole has undertaken to improve pandemic preparedness.

FILMS TO RAISE AWARENESS

During the film session, documentaries and video clips focused on several different pandemic related topics, all aiming towards an increase of public awareness about the dangers from influenza. In one example from a general information film prepared by France, a man infected with pandemic influenza was shown sneezing out letters to represent the contagious influenza virus. In the next picture, this man tossed a used virus-soaked tissue next to a trash bin, which is then picked up by a child. As the child walks out of the picture, one can see the virus-representing letters now on his hands. During the conclusion of the film, the mother thoroughly washes both her and her son’s hands with soap and warm water, flushing the letters down the drain.



Fig 1. The exercise conducted in the Pirkanmaa Hospital District in Finland showed that additional drugs and equipment must be made available to the individual hospital districts and more labour force will have to be organised in and around the pandemic hot spots.

Other films presented by France included a public information broadcast to educate those travelling to countries affected by avian influenza, and an animated film designed for use in a pandemic, highlighting action that the population should take, including promoting good hygiene practises, such as staying at home when possible, thoroughly washing hands and regularly disinfecting surfaces such as door knobs, phones and TV remote controls. The last clip focused on actions that should be taken by individuals and their families already showing flu symptoms. This stressed the need to phone a dedicated pandemic influenza telephone hotline and wait for further instructions, rather than seek treatment directly. The film also suggested other disease prevention measures, such as self-isolation, wearing a facemask, keeping doors closed, airing out rooms regularly and using a separate towel after washing hands.

A film from the UK specifically aimed at increasing public awareness by showing a domino chain reaction resembling the spreading of an influenza virus, only stopping at certain fixed blocks, which stood for particular safety measures that can be taken by each and every individual citizen. The halting of the falling dominos, for instance, was shown when people washed their hands, covered their mouths, or stayed home while not feeling well. The dominoes constantly reminded the viewer that influenza transmission was spread from person to person, and only by blocking such spread, could the trail of the virus be halted. All the domino chains end at the UK pandemic information brochure, and the film ends with the appeal to “Face it together, not spread it between us”.

In addition to the films focusing on the increase of public awareness, there were also contributions that targeted a more specific audience. The Netherlands presented a training film for health professionals and civil emergency staff about the dangers and potential impact of a pandemic. The film was interspersed with excerpts of news broadcasts showing the progression of the pandemic and its effects on different levels of society, including an emergency response team meeting, a pharmacist commenting on the distribution of vaccine stockpiles, a medical coordinator organising manpower to cope with the emergency situation, and people pouring into emergency rooms demanding treatment, leading to incidents of civil unrest.

Some movies were also aimed at those already involved in the preparedness plans, showing guidelines, recommendations and possible ways of optimising certain contingency plans prior to a pandemic outbreak. These included an automated active and proactive surveillance system in Portugal, which is capable of identifying an increased incidence of infections and automatically informing local and supra- regional authorities, such as ECDC.

POSTERS HIGHLIGHTING INNOVATIONS

The lobby of the workshop venue was the location for the poster session. The poster area was divided into eight sections, with each section outlining different aspects regarding pandemic influenza and preparedness planning, giving the Member States an opportunity to present, share and discuss innovations and resources.

In posters section A, Austria, Estonia, Portugal, Spain and others shared first hand experiences gathered in influenza pandemic exercises, which had been conducted in preparation of a possible outbreak.

In Austria, a national pandemic exercise was used to optimise its pandemic preparedness. The aim was to test communication between the health ministry, other government departments and the nine regional health boards, the general preparedness for an influenza pandemic, and to gather information about the interoperability of regional plans.



Fig 2. First Austrian National Influenza Pandemic Exercise.

The two-day command-post exercise involved 193 ‘players’ from all levels of the health authorities, including local hospitals. Central themes of the exercise were logistical issues, organisation of manpower where needed, availability of vaccines and trans-border issues, as many workers from other countries commute to Austria every day. (See fig 2).

Northern Portugal also conducted a pandemic scenario simulating a possible influenza outbreak brought to the city of Porto by a family returning from Indonesia. The scenario demanded action from the northern regional health authorities, army officials and the working group on Pandemic Influenza from the Public Health Department to minimise the social impact of a pandemic, and improve early detection and diagnostic procedures.

‘Communication’ was the headline for the second poster section. A poster from Ireland highlighted a national electronic database, which links clinical epidemiological and laboratory based information/ records. Its objective is to develop an enhanced surveillance system for influenza, which will quickly record first pandemic influenza cases and outbreaks, immediately alerting authorities.

The Spanish presented a poster on their nationwide influenza guidance ‘Intranet’ for health authorities, which provides updated information and plans on pandemic influenza. This intranet is accessible to more than 150 public health professionals from different ministries both at national and regional level, and holds information on the world’s global situation, posting daily reports and offering access to regional, national and international preparedness plans. (See fig 3).

Highlighting other areas of communication, the Swedish experts presented a poster sharing their experiences in communication logistics in a pandemic. Originally triggered by the needs of the general public to find answers during the avian flu outbreaks in other parts of Europe, the Swedish government installed nation-wide telephone hotlines, call centres and published a website with a database of 160 questions and answers surround-

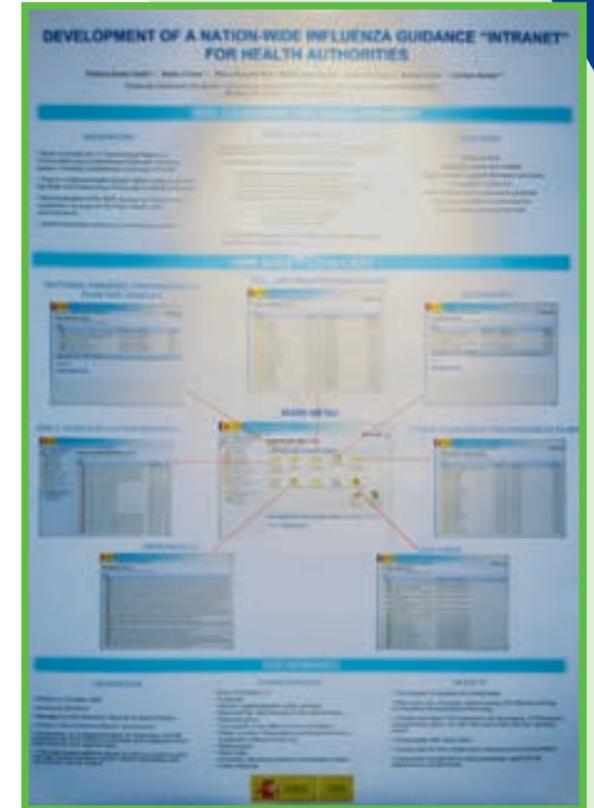


Fig 3. Spain’s nation-wide influenza guidance “Intranet for Health Authorities”.

ing infectious diseases to keep their citizens informed. Malta presented a poster of communication tools for influenza prevention designed specifically for the Maltese population.

Poster section C focused on infection control measures and hospital preparedness. In this presentation area, several Member States displayed posters, which are commonly used to educate and train the general public, as well as health care employees. The UK showed posters on how to properly apply and dispose of personal protective equipment, such as facemasks, gloves and protective goggles, and how to wash your hands. The accompanying illustrations and easy-to-remember rhymes, such as ‘coughs and sneezes spread diseases’ assisted understanding and memorability.



Fig 4. Public awareness messages from France.

The French delegation also displayed the outputs of work to enhance public awareness. ‘Stay home when feeling sick’ and ‘If you are ill, protect others by wearing a facemask’ were just some of the slogans shown. (See fig 4).

Finnish experts showed their design and testing of a pandemic scenario including infection control measures and hospital and pandemic preparedness. The hospital exercise exemplified several major challenges that had to be addressed, including the need to deliver additional drugs and equipment to the individual hospital districts, and more labour force in and around the pandemic hot spots. (See fig 1).

In section D on general pandemic preparedness, the ECDC featured their assessment of the preparedness status for influenza pandemics in the European Union. The assessment, based on a series of country visits and using a clearly defined tool, helped to identify gaps in existing preparedness plans in the EU and provides information for future planning activities. Cyprus also presented pan-

demical planning work to define the total numbers that may need to access medical care and hospital facilities in Cyprus using population data and planning assumptions such as the infection attack-rate.

Section E covered posters regarding pandemic vaccination and antivirals.

The German ‘Robert Koch Institut’ presented a poster, in which they assessed prioritisation strategies for pandemic influenza vaccinations in the 27 countries of the EU and other industrialised countries. A prioritisation of vaccine distribution will become necessary during the initial phase of a pandemic, as vaccine availability will be limited. The poster highlighted that the majority of the countries have created priority groups according to the WHO recommendations. These include healthcare workers, essential service providers and high-risk individuals. The poster’s authors recommend informing the public of the reasons for vaccine prioritisation, as this may play a key role when trying to maintain public order in a crisis situation. Underlining this sensitive issue, they also suggest the consultation of ethical experts. (See fig 5).

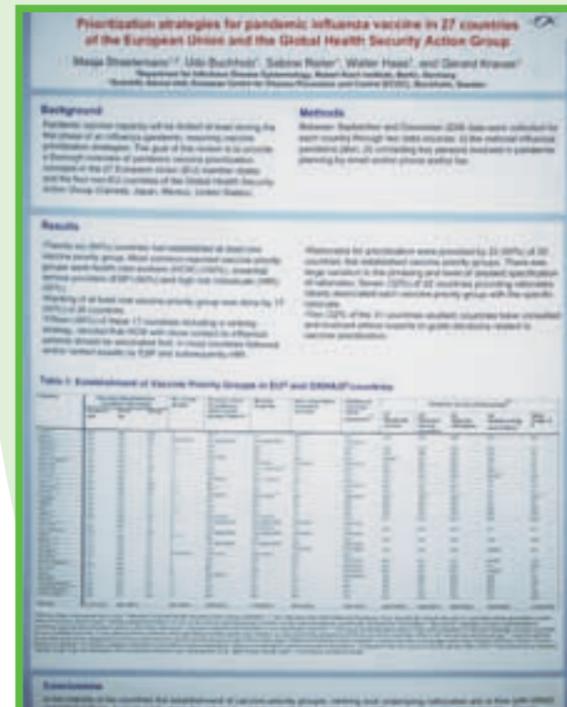


Fig 5. Influenza vaccine prioritisation strategies from the Robert Koch Institut, Germany.

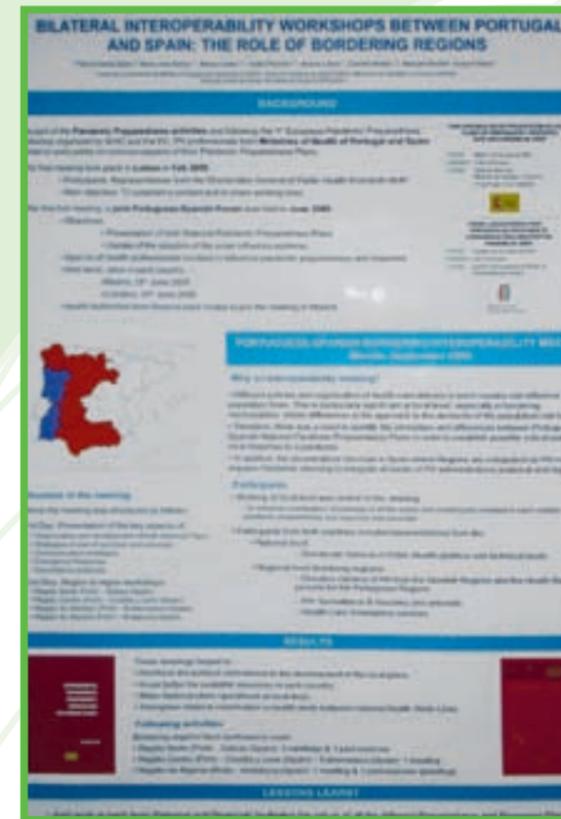


Fig 6. Bilateral interoperability workshop between Portugal and Spain.

Posters in section F highlighted intersectoral issues and business continuity planning. Sweden presented a poster highlighting preliminary business continuity guidelines, produced by the Swedish emergency management agency to assist public and private companies to plan for a pandemic. They recommended defining and prioritising activities within the organisation, which are considered to be crucial for the maintenance of functionality. On the basis of these guidelines, a pilot study was conducted in one county, which later led to further improvements and to the recommendation for all other Swedish counties to follow.

Regarding the problematic issue of interoperability and coordinating a sufficient response in bordering regions, the Portuguese and Spanish Ministries of Health presented their work to identify common aspects of their preparedness plans (See fig 6). Their main objective was to identify similarities and differences between the existing national preparedness plans, in order to establish possible

critical points in the local response to a pandemic and assuring interoperability. In retrospect, these meetings helped to define the available resources, making the national plans more operational and reinforcing the political commitment to the development of local plans. Portugal also presented a poster focusing on the regional interoperability planning between the autonomous region of Galicia and the northern region of Spain.

Poster section G was dedicated to surveillance and other matters. DG SANCO presented tools they have developed to improve coordination and effective action, including the online tool MediSys, which collects articles, classifies these, and detects breaking news with the aim of improving early warning and detection of health risks.

CONCLUSION

In conclusion, delegates at the workshop agreed that although there was still work to be done to prepare for an influenza pandemic, the films and posters presented during the workshop demonstrate that great strides have been made, and many innovative approaches have been taken throughout the EU in a broad range of pandemic planning areas. This, together with the willingness to learn from each other and share best practise that was demonstrated by all delegates over the three days of the workshop, can only be of positive benefit to EU citizens when the next pandemic occurs. Only by coordinating efforts at an international level, and increasing public awareness at a local level, can the EU really be prepared; as the UK film reminded everyone, to minimise the impact of pandemic influenza, we must ‘face it together and not spread it between us’.

