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**WHO Regional Office for Europe
Sub-Regional Influenza Surveillance Meeting**



**11–14 September 2012, Riga, Latvia
Summary report**

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Background

Since 2008, the World Health Organization Regional Office for Europe (WHO/Europe), in coordination with the European Centre for Disease Prevention and Control (ECDC), has collaborated with Member States to improve influenza surveillance in the WHO European Region.

The aim of this meeting was to bring together clinicians, epidemiologists and virologists involved in influenza surveillance in the Region, to discuss technical and operational issues related to influenza surveillance and highlight the progress since the implementation of sentinel surveillance.

Objectives

The main objectives of the meeting were to:

- make preparations for EuroFlu with respect to the 2012/2013 season
- provide a situation update on the 2011/2012 influenza season, with respect to epidemiology, virology and vaccination;
- discuss opportunities and challenges related to surveillance for severe cases of influenza;
- provide training on the analysis, presentation and dissemination of the data collected within influenza surveillance systems in the countries; and
- provide a briefing on the Pandemic Influenza Preparedness Framework.

Target audience

The target audience was national focal points for the epidemiological and virological surveillance of influenza who were designated by health authorities and hospital clinicians of participating Member States responsible for caring for patients with severe disease due to influenza.

Other participants included partners from WHO headquarters, the WHO Collaborating Centre for Reference and Research on Influenza at the National Institute for Medical Research (NIMR), London, the WHO Collaborating Centre for Pandemic Influenza and Research at the University of Nottingham, the State Serum Institute of Denmark and the Health Protection Agency of the United Kingdom.

Highlights of the meeting

See the Agenda (Annex 1) for a complete list of presenters and presentations.

Influenza surveillance presentations were given by eleven countries: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Russian Federation, Tajikistan, Ukraine and Uzbekistan. Countries presented information on their surveillance system design, results from the 2011/2012 season, laboratory capacity and programmatic changes and challenges. These presentations led to several discussions, including a discussion on the merits and drawbacks of a country supporting both a sentinel and universal surveillance system and the cost–benefit of routine serologic surveillance.

EuroFlu

EuroFlu's preparations for the upcoming influenza season were presented. New reporting rules for reporting antigenic and genetic characterization data according to the week of sampling and new interpretation variables of antiviral susceptibility data were discussed (www.euroflu.org).

Influenza-like illness data

In the influenza-like illness (ILI) data presented at the meeting, the elderly represented only a very small proportion of the cases, which may make it difficult to understand influenza characteristics in this population. One reason for this could be that children and adults seek health care because they require a leave slip from the doctor when they miss school or work due to illness. Since the elderly do not need these – they do not seek health care as often and therefore are not included in the surveillance system.

Small numbers of elderly were also reported to be admitted to the hospital with acute respiratory infection (ARI) in most eastern European countries, although this population is known to be at an increased risk for complications.

WHO recommendations

The updated WHO recommendations on the use of seasonal influenza vaccine were presented and discussed. While the target groups for seasonal influenza vaccination in the updated recommendations largely remained unchanged from the previous recommendations in 2005 (www.who.int/wer/2012/wer8747.pdf), the new recommendations emphasize the inclusion of pregnant women (any trimester) as a priority target group in national vaccination programmes initiating influenza vaccine programmes or expanding the target groups to receive vaccination (www.euro.who.int/en/what-we-do/health-topics/communicable-diseases/influenza/vaccination).

Children aged 6–59 months are also recommended for vaccination. However, it was noted that since immunologically naïve young children must be vaccinated twice, this could present a challenge to implementing influenza vaccination in the national vaccination plan.

National vaccination strategies were discussed; overall, influenza vaccine coverage was reported to be low in this Region with many countries reporting a lack of a strong vaccination strategy and monitoring systems.

SARI surveillance

Clinicians participating in the sentinel severe acute respiratory infection (SARI) surveillance systems presented case series information from six countries (Belarus, Georgia, Kazakhstan, Kyrgyzstan, Russian Federation and Ukraine). Presentations included information on severe influenza in pregnant women, co-infections and complications seen in patients with SARI and severe complications associated with influenza infection, such as endocarditis, myocarditis, acute stroke and encephalitis. None of the cases presented as part of the case series had been vaccinated against influenza, even though these patients were part of an influenza vaccine priority target group.

Discussions among the clinicians provided insight into some of the challenges of performing influenza surveillance in a clinical setting. While timely SARI surveillance data can be very useful to understanding the current influenza situation in a country, laboratory results from SARI cases collected as part of the surveillance system were often not available in time to be of diagnostic utility for SARI patients. Clinicians also felt that increased, timely feedback of epidemiologic data from the central level would be of great benefit.

Severe influenza

Two presentations dealing with the risk of severe influenza were given. A presentation on the risk factors for severe and fatal disease due to influenza in Romania discussed how surveillance data could be used to inform policies. Preliminary results were presented for a multicountry risk factor study. SARI cases were investigated for severe outcomes in seven countries in the WHO European Region during the period 2009–2012. With the participation of a large number of countries in eastern Europe, this study will help to fill a gap in knowledge about SARI risk factors in the European Region that had previously existed.

Further research

Additional sessions on scientific studies and research highlighted activities ongoing in the WHO European Region. Some projects are underway to increase understanding of the burden of disease and mortality in the countries of the Region. Two new projects were discussed that are attempting to evaluate the role of respiratory syncytial virus (RSV) and other (non-influenza) respiratory pathogens in acute respiratory disease in the Region, as well as a study to explore the effect of climatic conditions on the seasonality of influenza. Researchers involved in these studies used this opportunity to solicit participation from additional countries at the meeting.

A new manual for estimating burden of disease due to influenza that is being developed by WHO was described to the group, which led to discussions about the possibility of piloting this manual in the Region.

Preliminary analysis of the data forms submitted to the WHO Collaborating Centre for Reference and Research on Influenza at NIMR in London (WHO CC) for the WHO vaccine strain selection consultation from two influenza seasons revealed a positive trend in quality of submitted virological and epidemiological surveillance data with a good representativeness of countries shipping specimens/isolates to the WHO CC, and highlighted the need for further work to improve timeliness of specimens/isolates being shipped in time for the WHO vaccine strain selection consultation.

Pandemic preparedness

A briefing was held on the Pandemic Influenza Preparedness (PIP) Framework for the sharing of influenza viruses and access to vaccines and other benefits (<http://www.who.int/influenza/pip/en/>). The PIP Framework objectives and transfer of PIP biological materials were presented and discussed.

Key conclusions and recommendations

In the last 10 years great strides have been made to expand the breadth and scope of influenza surveillance available in the eastern European Region. Countries are currently reporting consistent stable surveillance information to EuroFlu and WHO.

It is now a good time for countries to improve laboratory and surveillance capacities in light of gaps highlighted by the 2009 pandemic. By sharing circulating influenza viruses with the WHO Global Influenza Surveillance and Response System, the European Region is contributing vital information needed for the WHO recommendations on composition of influenza virus vaccines.

Strengthening virological and epidemiological surveillance for mild and severe disease caused by influenza and sharing this data with WHO will help to better inform global risk assessment and influenza vaccine strain selection.

Annex 1

AGENDA

WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR EUROPE



WELTGESUNDHEITSORGANISATION
REGIONALBÜRO FÜR EUROPA

ORGANISATION MONDIALE DE LA SANTÉ
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ВСЕМИРНАЯ ОРГАНИЗАЦИЯ ЗДРАВООХРАНЕНИЯ
ЕВРОПЕЙСКОЕ РЕГИОНАЛЬНОЕ БЮРО

**WHO Regional Office for Europe Annual Meeting on Influenza
Surveillance for Eastern European Countries
Riga, Latvia
Radisson Blu Hotel Latvija, Riga, Latvia
11-14 September 2012**

27 September 2012

Original: English

Final Programme

Tuesday, 11 September 2012

12:00-13:00 Registration of participants

(A light lunch will be served during registration)

13:00-13:15 Welcome and opening of the meeting (*Pernille Jorgensen, WHO and Ilze Straume, Head of the Health Promotion Division, Public Health Department Ministry of Health in Latvia*)

13:15-13:20 Outcomes of the Joint ECDC and WHO European regional influenza surveillance meeting, Warsaw, Poland, 30 May - 1 June 2012 (*Pernille Jorgensen, WHO*)

13:20-13:40 Introduction and presentation on influenza surveillance in Latvia (*Jurijs Perevoscikovs, Epidemiological Safety and Public Health Department, Latvia*)

Reviewing the past and upcoming season

13:40-14:10 Overview of the 2011/2012 season (*Ganna Bolokhovets, WHO*)

14:10-14:40 New influenza vaccine recommendations 2012 (*Pernille Jorgensen, WHO*)

14:40-15:15 Preliminary analysis of the data forms submitted to WHO Collaborating Centre for the Vaccine Composition Meeting (*Dmitriy Pereyaslov, WHO*)

- 15:15-15:45 *Coffee break*
- 15:45-16:00 Preparations for EuroFlu with respect to the 2012-2013 season (*Dmitriy Pereyaslov, WHO*)
- 16:00-16:25 Risk factors for severe and fatal disease due to influenza in Romania – using surveillance data to inform policies (*Odette Popovici, National Institute of Public Health, Romania*)
- 16:25-16:50 Preliminary results of a multi country analysis on risk factors for severe disease and death among SARI patients (*Tamara Meerhoff, Temporary Adviser to WHO*)
- 16:50-17:15 Incidence, Severity, and Impact 2012 (ISIRV) 2nd International Conference on Seasonal and Pandemic Influenza, September 2012, Munich, Germany (*Tamara Meerhoff, Temporary Adviser to WHO and Diane Gross, WHO*)
- 18:00 *Dinner*

Wednesday, 12 September 2012

Country presentations (10 minutes plus 5 minutes discussion)

- 09:00-09:15 **Armenia** - Introduction to sentinel surveillance in Armenia (*Liana Torosyan, State Hygiene and Anti-epidemic Inspectorate*)
- 09:15-09:30 **Azerbaijan** - Sentinel influenza surveillance in Azerbaijan 2011-2012 (*Sadraddin Gurbanov, Republican Anti-plague Station*)
- 09:30-09:45 **Belarus** - Influenza surveillance in Belarus (*Veronika Shimanovich, Republican Centre for Hygiene, Epidemiology and Public Health, Natalie Gribkova, Research Institute for Epidemiology and Microbiology*)
- 09:45-10:00 **Georgia** - Influenza surveillance in Georgia (*Giorgi Chakhunashvili, National Centre for Disease Control and Public Health*)
- 10:00-10:15 **Kazakhstan** - Influenza surveillance in Kazakhstan (*Aigul Temirgaliyeva, State Committee for Sanitary and Epidemiological Surveillance*)
- 10:15-11:00 *Coffee break*

Country presentations (10 minutes plus 5 minutes discussion), continued

- 11:00-11:15 **Kazakhstan** - Results of influenza virological surveillance in Kazakhstan in 2010-2011 and 2011-2012 (*Gauhar Nusupbaeva, Research-Practical Center of Sanitary-Epidemiological Expertize and Monitoring*)

- 11:15-11:30 **Kyrgyzstan** - Influenza surveillance in Kyrgyzstan (*Dinagul Otorbaeva and Kalia Kasymbekova, Department of State Sanitary Epidemiological Surveillance, Ministry of Health*)
- 11:30-11:45 **Russian Federation** - Results of sentinel influenza surveillance in the Russian Federation, season 2011-2012 (*Elizaveta Smorodintseva, Ministry of Health, Research Institute of Influenza*)
- 11:45-12:00 **Tajikistan** - Influenza surveillance in Tajikistan (*Muyassar Sattarova, Ministry of Health*)
- 12:00-12:15 **Uzbekistan** - Prophylaxis activities and influenza surveillance in Uzbekistan, season 2011-2012 (*Farida Khalmukhamedova, Centre of State Sanitary and Epidemiological Surveillance*)
- 12:15-12:30 **Ukraine** - Influenza surveillance in Ukraine (*Dr Oleksandr Zaika, State Sanitary and Epidemiological Service of Ukraine and Dr Alla Mironenko, L.V.Gromashevski Institute, Academy of Medical Sciences*)
- 12:30-13:30 *Lunch*
- 13:30-14:15 Results from the WHO/ECDC working group on qualitative indicators (*A. Tomas Vega Alonso and Tamara Meerhoff, Temporary Advisers to WHO*)
- Virology session***
- 14:15-14:40 Season 2011-2012: Characterization of the viruses in circulation (*Nicholas Cattle, WHO CC London*)
- 14:40-14:50 Briefing on the Pandemic Influenza Preparedness Framework for the sharing of influenza viruses and access to vaccines and other benefits (“PIP Framework”) (*Dmitriy Pereyaslov, WHO*)
- 14:50-15:10 Peculiarities of influenza epidemic during the season 2011-2012 in the Russian Federation and new approaches to further improvement of influenza surveillance (*Anna Sominina, NIC St. Petersburg*)
- 15:10-15:20 WHO External Quality Assurance Project (EQAP) (*Dmitriy Pereyaslov, WHO*)
- 15:20-15:45 **Q&A session**
- 15:45-16:15 *Coffee break*
- Research activities***
- 16:15-16:40 RSV study in the European Region (*Charles Beck, University of Nottingham*)

- 16:40-16:50 The burden of respiratory pathogens other than influenza in the WHO European Region: results from a literature review (*Anneke Nijenhuis, Temporary Adviser to WHO*)
- 16:50-17:00 NASA study on climate and influenza transmission (*Pernille Jorgensen, WHO*)

Thursday, 13 September 2012

Case studies by clinicians participating in sentinel SARI surveillance

- 09:00-11:00
- Peculiarities of diagnostics and clinical course of influenza infection in pregnant women (*Vyacheslav Kaminsky, Ministry of Health, Ukraine*)
 - Case studies of severe influenza infection (*Igor Karpov, Ministry of Health, Belarus*)
 - Cases of severe influenza from Georgia (*Shorena Dvali, Physician, Georgia*)
 - Influenza in hospitals in Kazakhstan (*Guljanat Shirshikbaeva, Hospital for Infectious Diseases Kazakhstan*)
 - Clinical and epidemiological SARI situation in Kyrgyzstan (*Ainura Uzakbaeva, Republic Clinical Infection Diseases Hospital*)
 - Influenza A(H1N1)pdm09 as a cause of lethal pneumonia in Russia 2009-2010: epidemiological, biological, and genetic properties (*Elena Burtseva, D. I. Ivanovsky Virology Institute, RAMS*)
- 11:00-11:30 *Coffee break*
- 11:30-12:00 United Kingdom experience in management of influenza outbreaks in institutions (*Richard Pebody, HPA, London*)
- 12:00-12:30 Round table discussion on managing severe influenza in hospitals (*Craig Hampton, WHO*)
- 12:30-13:30 *Lunch*
- 13:30-13:50 Global influenza burden estimates (*Anthony Mounts, WHO headquarters*)
- 13:50-14:20 Monitoring influenza deaths trends (*Anne Mazick, State Serum Institute, Denmark*)
- 14:20-14:50 Estimating burden of influenza (*Jens Nielsen, State Serum Institute, Denmark*)
- 14:50-17:00 Informal group meetings and preparations for the following day

Friday, 14 September 2012

- 09:00-10:45 Designing a national weekly influenza surveillance bulletin – a participatory training (*Diane Gross, WHO*)
- Overview of country bulletins
 - Group work
- 10:45-11:15 *Coffee break*
- 11:15-12:15 Group work presentations on country bulletins, and discussion
- 12:15-12:30 Closure of the meeting (*Pernille Jorgensen, WHO*)