

Issue No. 8, July 2013

Flu Focus is an e-newsletter published by the WHO Regional Office for Europe that covers recent developments, research, reports, materials, upcoming events and resources on influenza. It is sent on a regular basis throughout the influenza season (October – May).

This issue of *Flu Focus* will be available shortly on the WHO Regional Office for Europe web site at <http://www.euro.who.int/flufocus> in both English and Russian.

Этот выпуск *Flu Focus* будет также вскоре помещен на сайте Европейского регионального бюро ВОЗ: <http://www.euro.who.int/flufocus> на английском и русском языках.

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Features

Middle East Respiratory Syndrome Coronavirus (MERS-CoV) update

As of 21 July 2013, WHO has been informed of a total of 90 laboratory-confirmed cases of infection with MERS-CoV worldwide, including 45 deaths: 11 of these cases have been reported from countries in the WHO European Region and include 5 deaths.

So far, three patterns of epidemiology have been exhibited by MERS-CoV cases: sporadic cases in communities for which neither the source of the virus infection nor how these people became infected is known, clusters of infections in families in which there is close contact with a sick family member, and clusters of infections in health care facilities whereby the most likely pattern of transmission is from an infected person admitted to hospital with subsequent transmission of the virus to other people in the health care facility. Although no current evidence of sustained human-to-human transmission, MERS-CoV may evolve to spread quickly among humans and affect wider geographical areas.

To address knowledge gaps in understanding the emergence of this virus, clinical manifestations and the transmission risk, over 100 public health experts met at WHO's Eastern Mediterranean Regional Office in Cairo, Egypt, on 20–22 June 2013 to identify priority public health actions to respond to the ongoing outbreak of disease caused by the virus. The experts came from all the countries in the Middle East, North Africa and Europe which have already registered MERS-CoV cases, and from throughout WHO's Eastern Mediterranean Region (EMR).

On 5 July 2013, reflecting the need for a global response to the continuing outbreak, WHO Director-General Margaret Chan called for the establishment of an Emergency Committee on MERS-CoV under the International Health Regulations (IHR). Based on the information now available and using a risk-assessment approach, the Committee members unanimously decided on 17 July 2013 that the situation does not at present meet the conditions for a Public Health Emergency of International Concern (PHEIC).

Also on 5 July 2013, WHO Regional Director for Europe Zsuzsanna Jakab arranged a comprehensive briefing on MERS-CoV for health ministers attending the WHO European Ministerial Conference on Nutrition and Noncommunicable Diseases in the Context of Health 2020 in Vienna, Austria, to ensure the full engagement of European Member States in this global effort.

WHO/Europe will continue to help Member States prepare for the occurrence of cases of MERS-CoV by supporting the development of laboratory capacities and by providing protocols for case management, infection control and patient sampling. Member States are encouraged to continue surveillance for MERS-CoV, educate health care workers about the disease and prepare national case investigation protocols. Detailed epidemiological, clinical and virological data should be collected from each case and shared with WHO. Furthermore, countries should be prepared to collect serum samples for serological studies to support this work. WHO/Europe publishes a regular summary of the MERS-CoV situation and key WHO guidance on its web site in English and Russian. The Office coordinates the regional response to MERS-CoV with the European Union and the European Centre for Disease Prevention and Control, and facilitates information exchange among countries in the WHO European and Eastern Mediterranean regions.

[MERS-CoV updates – European Region](#)
[MERS-CoV updates – worldwide](#)

Avian influenza A(H7N9) update

As of 20 July 2013, a total of 134 laboratory-confirmed cases of human infection with avian influenza A(H7N9) virus have been reported to WHO; 133 cases by China National Health and Family Planning Commission and one case by the Taipei Centers for Disease Control (Taipei CDC). Although cases have been reported in both men and women, and across a wide age range, most cases have occurred in middle-aged or older men. Forty-three people have died, and most of the other cases were considered severe.

Human infection appears to be related to exposure to live poultry or contaminated environments. Closure of live bird markets is believed to have had a significant impact on the spread of the disease: since the end of May 2013, only 1 additional case has been reported to WHO (on 20 July). However, much remains unknown about this virus, including the animal reservoir(s) in which it is circulating, the main exposures and routes of transmission, and the scope of the spread of this virus among people and animals. Although four small human clusters have been reported, evidence does not support sustained human-to-human transmission.

The WHO Regional Office for Europe is organizing training in central Asia and the Caucasus with the aim of strengthening capacities to detect, assess and respond to emerging pathogens such as A(H7N9) and MERS-CoV. The training will also prepare countries for the upcoming influenza season with a focus on treating severe acute respiratory infections.

[Avian influenza A\(H7N9\) updates – European Region](#)
[Avian influenza A\(H7N9\) updates – worldwide](#)

Recommendations

Based on the current situation and available information regarding both MERS-CoV and influenza A(H7N9), WHO encourages all Member States to continue their surveillance for severe acute respiratory infections and to review carefully any unusual patterns. WHO does not advise special screening at points of entry with regard to either of these events nor does it currently recommend the application of any travel or trade restrictions.

Surveillance

Overview of 2012/2013 influenza season

The WHO European Influenza Surveillance Network (EuroFlu) presents epidemiological and virological data that are collected on seasonal influenza by clinician and laboratory networks on a weekly basis. European Union and European Economic Area Member States report to the European Centre for Disease Prevention and Control with which the WHO Regional Office for Europe coordinates influenza surveillance. During the 2012/2013 influenza season, EuroFlu received data from 49 out of 53 Member States.

Key features of the 2012/2013 influenza season

Similar to previous seasons, the 2012/2013 influenza season started around week 48/2012, peaked around week 5/2013 and lasted until week 16/2013. In general, influenza morbidity rates, influenza-like illness (ILI), acute respiratory infections (ARI) or severe acute respiratory infections (SARI) were higher than in the previous season. Influenza activity was reported as low or medium, with 11 countries reporting higher than usual levels of influenza activity at some point in time over the entire season, compared to 4 countries reporting higher than usual levels in the previous season.

All three seasonal influenza viruses co-circulated this season, with, in general, influenza A viruses predominating early in the season followed by influenza B. Overall, 63% of viruses were influenza A and 37% influenza B; and of the sub-typed influenza A viruses, about two-thirds were A(H1N1)pdm09 and one third A(H3N2). Severe cases occurred mainly in those above 15 years of age and were due mainly to A(H1N1)pdm09 and influenza B. Excess all-cause mortality as determined in up to 18 countries that participate in the EuroMoMo project (www.euromomo.eu/index.html) was only observed in those above age 64 and was comparable with the previous season.

The majority of influenza viruses that were characterized antigenically corresponded to those recommended by WHO for inclusion in the current northern hemisphere seasonal influenza vaccine, suggesting a good match of circulating viruses with the seasonal influenza vaccine.

Monitoring for susceptibility to influenza antivirals showed no indication of increased resistance to neuraminidase inhibitors among influenza viruses circulating in the Region this season. However, as in previous years, all A(H1N1)pdm09 and A(H3N2) viruses screened for susceptibility to adamantanes were found to be resistant.

WHO/Europe coordinates influenza surveillance with ECDC. Detailed information is available in the regular bulletins:

[WHO EuroFlu bulletin](#)

[ECDC Weekly Influenza Surveillance Overview \(WISO\)](#)

Third annual joint WHO/Europe and ECDC Influenza Surveillance Meeting 29–31 May 2013, Istanbul, Turkey

The WHO/ECDC annual meeting helps strengthen the influenza and other respiratory viruses surveillance community in Europe by bringing together key stakeholders, addressing pertinent issues and flagging key updates. Building and strengthening this network is paramount for ECDC and WHO/Europe's collaboration with Member States, on routine as well as critical and urgent issues, such as the recent emergence of Middle East respiratory syndrome coronavirus (MERS-CoV) and influenza A(H7N9) virus.

Among the participants at the 2013 meeting were national influenza focal points from the 50 Member States of the WHO European Region that report surveillance data to the EuroFlu platform. They reviewed recent developments in the field and discussed ways to increase collaboration and improve the quality of surveillance data collection. Important outcomes of the meeting include recommendations for the EuroFlu platform, sharing of national/severe influenza surveillance information and review of virus sharing practices in the Region for the vaccine strain selection process.

The meeting report will be posted on the WHO/Europe web site (www.euro.who.int/influenza).

Workshop on data management and analysis

1–3 May 2013, Nijmegen, the Netherlands

This workshop was designed for epidemiologists involved in routine data entry, data management and data analysis in Member States participating in a study of severe acute respiratory-tract infections (SARI) aimed at identifying risk factors for severe disease. These data may subsequently be used to target risk groups for vaccination and treatment.

The main objectives of the workshop were to introduce participants to:

- the basics of management of surveillance data;
- development of databases;
- quality of surveillance data;
- epidemiological data analysis of surveillance data.

The workshop was organized jointly by WHO/Europe, the United States Centers for Disease Control and Prevention and Radboud University Nijmegen Medical Centre, the Netherlands, and was attended by 12 participants from Albania, Armenia, Belarus, Georgia, Kyrgyzstan, Russian Federation and Ukraine.

Overview of sentinel systems for hospitalized severe acute respiratory infections (SARI) represented in the weekly EuroFlu surveillance bulletin

10 February 2013

Laboratory

New National Influenza Centre (NIC) in the WHO Global Influenza Surveillance and Response System (GISRS)



Photo: Radu Cojocaru

In November 2012, a team of WHO experts and a representative of the WHO Collaborating Centre for Reference and Research on Influenza at NIMR, London, United Kingdom, conducted an on-site assessment of the National Influenza Laboratory of the Republic of Moldova, upon request of the country's Ministry of Health. Based on the results of this assessment, the Laboratory was recognized in March 2013 as a WHO National Influenza Centre.

WHO warmly welcomes this new NIC in the European Region to the WHO Global Surveillance and Response System (GISRS), which now comprises 141 NICs in 111 WHO Member States. The Laboratory is located in Chisinau and headed by Constantin Spinu. The WHO/Europe influenza team looks forward to fruitful collaboration with our colleagues in the Republic of Moldova.

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[More on the Global Influenza Surveillance and Response System \(GISRS\)](#)

Laboratory procedures for A(H7N9)

The WHO Collaborating Centre for Reference and Research on Influenza at the Chinese National Influenza Centre in Beijing, China has shared laboratory procedures for serological detection of avian influenza A(H7N9) infections by turkey haemagglutination-inhibition assay and by microneutralization assay.

Laboratory Procedures: Serological detection of avian influenza A(H7N9) virus infections by turkey haemagglutination-inhibition assay
23 May 2013

[More on laboratory procedures](#)

Preparedness and response

2nd ISIRV International Symposium on Neglected Influenza Viruses

7–8 March 2013, Dublin, Ireland

ISIRV is an independent and international scientific professional society that promotes the prevention, detection, treatment and control of influenza and other respiratory virus diseases. This second meeting on zoonotic and animal influenza viruses explored the latest influenza surveillance data, vaccination and control strategies, diagnostic techniques, experimental research data and epidemiological and economic impact studies relating to swine, equine, canine and other nonhuman/nonavian influenza viruses.

Along with representatives from the Food and Agriculture Organization and OFFLU (global network of expertise on animal influenza), a representative of WHO/Europe participated in an expert panel discussion at the Symposium, during which officials, researchers and clinicians were encouraged to continue to pursue a coordinated approach to the control of influenza in humans and animals.

[Presentation abstracts](#)

Pandemic Influenza Preparedness Framework Advisory Group Meeting and Consultations

20–22 March 2013, Geneva, Switzerland

The Pandemic Influenza Preparedness Framework for the sharing of influenza viruses and access to vaccines and other benefits ("PIP Framework") brings together Member States, industry, other key stakeholders and WHO/Europe experts to implement a global, Member-State-developed approach to pandemic influenza preparedness and response. The topic of the Consultations on 21 March was: "Use of the Partnership Contribution".

[Meeting report](#)

Third ESWI European Influenza Summit

2 May 2013, Brussels, Belgium

This summit is an informal platform to exchange good practices and to initiate concrete actions to improve public health protection against influenza. The meeting was followed on 3 May with a workshop for European public health authorities on the outcome of the ESWI FluQuest survey conducted in 11 countries.

A summit report and presentations will be posted on the [ESWI Flu Summit web site](#).

Upcoming events

The Eighth Options for the Control of Influenza Conference

5–10 September 2013, Cape Town, South Africa

This Conference is held once every three years to showcase recent advances in the basic science and control and prevention of influenza.

Conference web site

Resources

MERS-CoV

WHO guidelines for investigation of cases of human infection with Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

5 July 2013

Interim surveillance recommendations for human infection with Middle East respiratory syndrome coronavirus (in English and Russian)

27 June 2013

Public health officials agree priority actions to detect and control MERS-CoV

22 June 2013

Treatment of MERS-CoV: Decision Support Tool

18 June 2013

WHO International travel and health update

5 June 2013

Infection prevention and control during health care for probable or confirmed cases of novel coronavirus (nCoV) infection

6 May 2013

Clinical management of severe acute respiratory infections when novel coronavirus is suspected: What to do and what not to do

11 February 2013

Influenza A(H7N9)

WHO risk assessment: Human infections with avian influenza A(H7N9) virus

7 June 2013

Interim WHO surveillance recommendations for human infection with avian influenza A(H7N9) virus

10 May 2013

Laboratory biorisk management for laboratories handling human specimens suspected or confirmed to contain avian influenza A(H7N9) virus causing human disease- interim recommendations

10 May 2013

Diagnostic preparedness in Europe for detection of avian influenza A(H7N9) viruses

ECDC, Technical briefing note, 23 April 2013

Summary of status of development and availability of avian influenza A(H7N9) candidate vaccine viruses

10 May 2013

Origin and diversity of novel avian influenza A H7N9 viruses causing human infection: phylogenetic, structural, and coalescent analyses

Liu D, Shi W, Shi Y, Wang D, Xiao H, Li W, et al. In: Lancet. 2013/05/07 ed.

Human infections with avian influenza A(H7N9) virus in China: preliminary assessments of the age and sex distribution

Arima Y, Zu R, Murhekar M, Vong S, Shimada T and the WHO Regional Office for the Western Pacific Event Management Team, In: Western Pacific Surveillance and Response Journal, 2013, 4(2).

doi:10.5365/wpsar.2013.4.2.005

Seasonal influenza

[ECDC influenza communication toolkit](#)

This toolkit aims to assist European Union Member States in devising communication activities to increase influenza vaccination uptake and promote preventive measures to limit its spread. The toolkit materials are designed to ensure that target audiences have access to the degree of information they may require.

[EuroFlu – WHO/Europe influenza surveillance](#)

[Weekly Influenza Surveillance Overview \(WISO\) – ECDC](#)

[Global epidemiological update](#)

[Global virological update](#)

Links

[WHO/Europe: Influenza, Vaccines and immunization](#)

[WHO headquarters: Influenza, Immunization, vaccines and biologicals](#)

[ECDC: Influenza](#)

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Flu Focus is also available on the WHO Regional Office for Europe web site in English and Russian.

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