COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 33, 11-17 August 2013

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

West Nile virus - Multistate (Europe) - Monitoring season 2013

Opening date: 3 June 2013 Latest update: 8 August 2013

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. During the transmission season between June and November, ECDC monitors the situation in EU Member States and neighbouring countries in order to inform blood safety authorities regarding WNF-affected areas and identify significant changes in the epidemiology of the disease. In the 2012 transmission season, 244 probable and confirmed cases were reported in the EU, and 693 cases in neighbouring countries.

➔Update of the week

Between 9 and 15 August, 12 West Nile fever human cases were detected in the EU. Austria reported its first confirmed case, but the place of infection is still under investigation. Greece reported nine new cases, two from a newly affected area (Kavala) and seven from areas with previous case reports (Attiki 4, Thessaloniki 1, Xanthi 2). Hungary reported its first case in Pest county, an area also affected in 2012. Romania reported its first confirmed case in Galati county, an area affected in 2011 and 2010.

In neighbouring countries, 44 new cases were reported. Israel reported eight cases in districts with previous case reports (Central 4, Haifa 2, Tel Aviv 2). The Russian Federation reported 26 cases, 16 from newly affected areas (Adygeya oblast 1, Lipetskaya oblast 2, Rostovskaya oblast 4, Samarskaya oblast 8, Voronezhskaya oblast 1), and 10 from oblasts with previous case reports (Astrakhan 3, Saratov 4, Volgograd 3). Serbia reported 10 cases, one from the newly affected district of Macva, and nine from areas with previous case reports (Grad Beograd 7, Podunavski district 1, Sremski district 1).

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu

Non EU Threats

Middle East respiratory syndrome- coronavirus (MERS CoV) - Multistate

Opening date: 24 September 2012 Latest update: 12 August 2013

Between April 2012 and 16 August 2013, 94 laboratory-confirmed cases, including 47 deaths, of an acute respiratory disease were notified to WHO. The new virus, named Middle East respiratory syndrome coronavirus (MERS-CoV), is genetically distinct from the coronavirus that caused the SARS outbreak. Cases have originated in Saudi Arabia, Qatar, Jordan and the United Arab Emirates (UAE). In addition, cases have occurred in Germany, the United Kingdom, Tunisia, France and Italy in patients who were either transferred for care of the disease or returned from the Middle East. The MERS-CoV reservoir has not been established, nor is it clear how transmission occurs.

➔Update of the week

Since 2 August 2013, no new cases have been reported. One death occurred in a previously diagnosed 83-year-old man from the United Arab Emirates.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 15 August 2013

A novel avian influenza A(H7N9) virus was detected in patients in China in March 2013. The outbreak has since spread to 12 Chinese provinces and Taiwan. The virus reservoir and the mode of transmission to humans have not been determined. Zoonotic transmission from poultry to humans is the most likely scenario. There is no epidemiological link between most of the cases, and sustained person-to-person transmission has not been observed.

➔Update of the week

Since the last update on 27 July 2013, one new case of A(H7N9) infection has been confirmed by WHO. The patient is a 51 -year-old woman from Huizhou, Guangdong Province. She became ill on 27 July 2013, was admitted to a local hospital on 28 July 2013 and transferred to a hospital in Huizhou City on 3 August 2013. She is currently in a critical condition.

A 61-year-old female case, reported on 20 July 2013 from Hebei province, deceased during the past week.

Influenza A(H5N1) - Multistate (world) - Monitoring human cases

Opening date: 15 June 2005 Latest update: 19 July 2013

The influenza A(H5N1) virus, commonly known as bird flu, is fatal in about 60% of human infections; sporadic cases continue to be reported, usually after contact with sick or dead poultry from certain Asian and African countries. No human cases have been reported from Europe.

➔Update of the week

Between 26 July and 9 August 2013, the WPRO has acknowledged three new laboratory-confirmed human cases with influenza A(H5N1) virus infection from Cambodia.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

II. Detailed reports

West Nile virus - Multistate (Europe) - Monitoring season 2013

Opening date: 3 June 2013 Latest update: 8 August 2013

Epidemiological summary

As of 15 August 2013, 30 human cases of West Nile fever have been reported in the EU and 119 cases in neighbouring countries in 2013.

EU Member States

Austria
One confirmed case, whose place of infection is still under investigation.

Greece
Twenty-six cases of WNF have been reported in Greece. The regions affected are Attiki (16), Imathia (1), Kavala (2), Thessaloniki (4) and
Xanthi (3). Attiki has reported ten confirmed cases, Thessalonki three and Xanthi one, according to the EU case definition.

Italy
Italy reported one confirmed case of WNF in Rovigo province, Veneto region. This province was not affected in 2012.

Neighbouring countries

Russia
Fifty-three cases of WNF have been reported in Russia: Adygeya oblast 1, Astrakhanskaya oblast 10, Lipetskaya oblast 2, Rostovskaya oblast 4, Samarskaya oblast 8, Saratovskaya oblast 8, Volgogradskaya oblast 19, and Voronezhskaya oblast 1.

Serbia
Thirty-nine cases have been reported from Serbia, 30 in Grad Beograd, three in Podunavski, two in Sremski, and one in each of the districts of Juzno-backi, Juzno-banatski, Kolubarski, Macvanski.

The former Yugoslav Republic of Macedonia
One case has been reported in Kocani (Eastern Macedonia).

Israel
Twenty-six cases (8 confirmed and 18 probable) have been reported in the Central, Haifa and Tel Aviv districts.

Websources: ECDC West Nile fever risk maps | ECDC West Nile fever risk assessment tool | Keelpno Greece | Astrakhanskaya oblast| Volgograd oblast | Saratovskaya oblast | Israel MoH | Serbia MoH | FYROM PHI | OIE 1 | OIE 2 |

ECDC assessment

West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures are considered important for ensuring blood safety by the national health authorities when human cases of West Nile fever occur. According to the EU blood directive, efforts should be made to defer blood donations from affected areas with ongoing virus transmission to humans.

Actions

ECDC produces weekly West Nile fever risk maps during the transmission season to inform blood safety authorities regarding affected areas.

ECDC published a West Nile fever risk assessment tool on 3 July 2013.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

Reported cases of West Nile fever for the EU and neighbouring countries

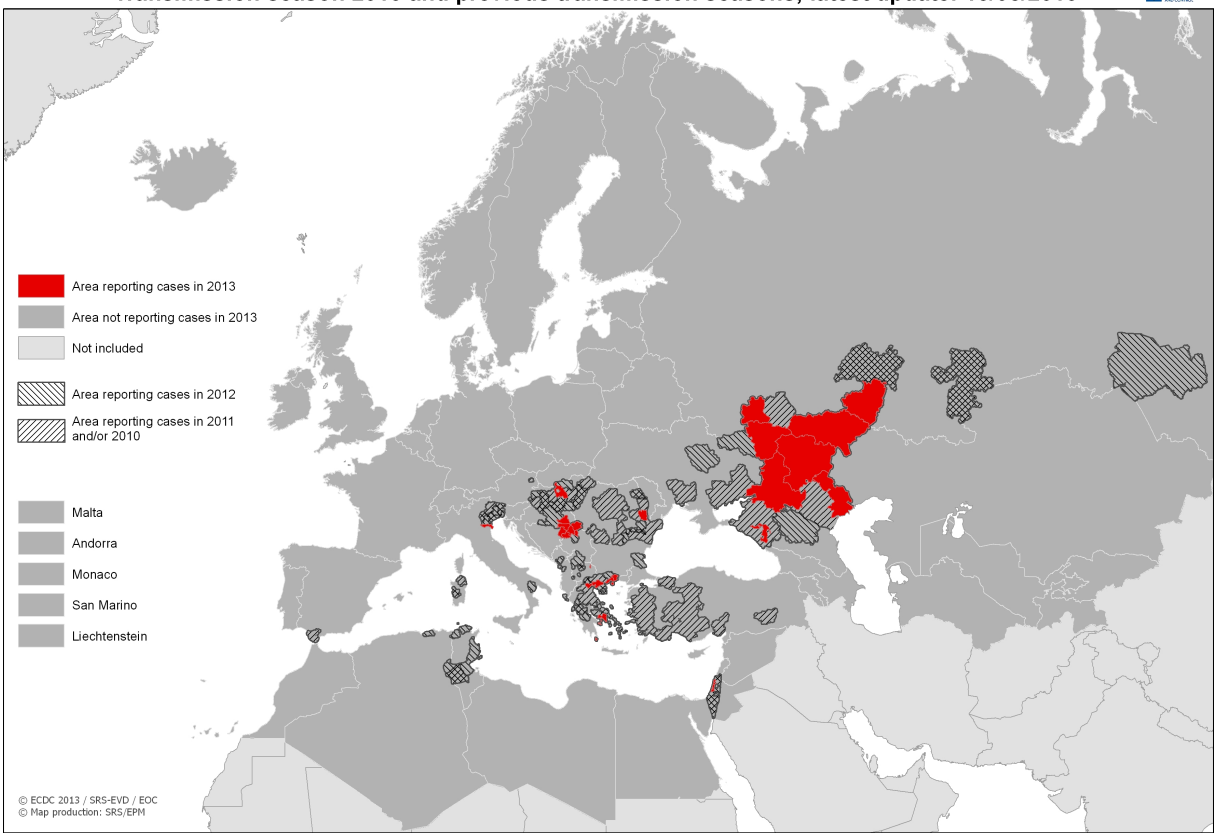
Transmission season 2013; latest update: 15/08/2013

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu

Reported cases of West Nile fever for the EU and neighbouring countries

Transmission season 2013 and previous transmission seasons; latest update: 15/08/2013



Middle East respiratory syndrome- coronavirus (MERS CoV) - Multistate

Opening date: 24 September 2012 Latest update: 12 August 2013

Epidemiological summary

As of 15 August 2013, 94 laboratory-confirmed cases of MERS-CoV, including 47 deaths, have been reported worldwide. All cases have either occurred in the Middle East or have had direct links to a primary case that was infected in the Middle East. Saudi Arabia has reported 74 cases, including 39 deaths, the UAE reported five, and Jordan two cases, both of which died. Thirteen cases have been reported from outside the Middle East: in the UK (4), Italy (3), France (2), Germany (2) and Tunisia (2). In France, Italy, Tunisia and the United Kingdom, there has been local transmission among patients who have not been to the Middle East but had been in close contact with laboratory-confirmed or probable cases. Person-to-person transmission has occurred both among close contacts and in healthcare facilities, but, with the exception of a nosocomial outbreak in Al-Ahsa, Saudi Arabia, secondary transmission has been limited. Eight asymptomatic cases were reported by Saudi Arabia and two by the UAE. Six of these cases were healthcare workers.

On 9 July, WHO established an Emergency Committee to advise WHO's Director-General on the status of the current situation concerning MERS-CoV. On 17 July, the second meeting of the Emergency Committee under the International Health Regulations (2005) was held by teleconference. It concluded unanimously that with the information now available, and by using a risk assessment approach, the conditions for a Public Health Emergency of International Concern have not been met.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

The Ministry of Health of Saudi Arabia updated its Health Regulations for travellers to Saudi Arabia for the Umrah and Hajj pilgrimage regarding MERS-CoV and now recommends that the elderly, those with chronic diseases, pilgrims with immune deficiency, malignancy and terminal illnesses, pregnant women and children coming for Hajj and Umrah this year should postpone their journey.

WHO published a travel advice on MERS-CoV for pilgrimages on 25 July 2013.

The WHO guidelines for investigation of cases of human infection with MERS-CoV were published in July 2013. On 30 July 2013, the MERS-CoV Initial Interview Questionnaire of Cases – Guide for the interviewer was published to support the investigators.

Web sources: ECDC RRA Update 22 July | ECDC novel coronavirus webpage | WHO | WHO MERS updates | WHO travel health update | WHO Euro MERS updates | InVS 25 June | CDC MERS |

ECDC assessment

The continued detection of MERS-CoV cases in the Middle East indicates that there is an ongoing source of infection present in the region. There is therefore a continued risk of cases occurring in Europe associated with travel to the area. Surveillance for cases is essential, particularly with expected increased travel to Saudi Arabia for Ramadan in July and the Hajj in October.

The risk of secondary transmission in the EU remains low and could be reduced further through screening for exposure among patients presenting with respiratory symptoms and their contacts, and strict implementation of infection prevention and control measures for patients under investigation.

Actions

The latest ECDC rapid risk assessment was published on 22 July 2013.

The results of an ECDC coordinated survey on laboratory capacity for testing the MERS-CoV in Europe were published in EuroSurveillance.

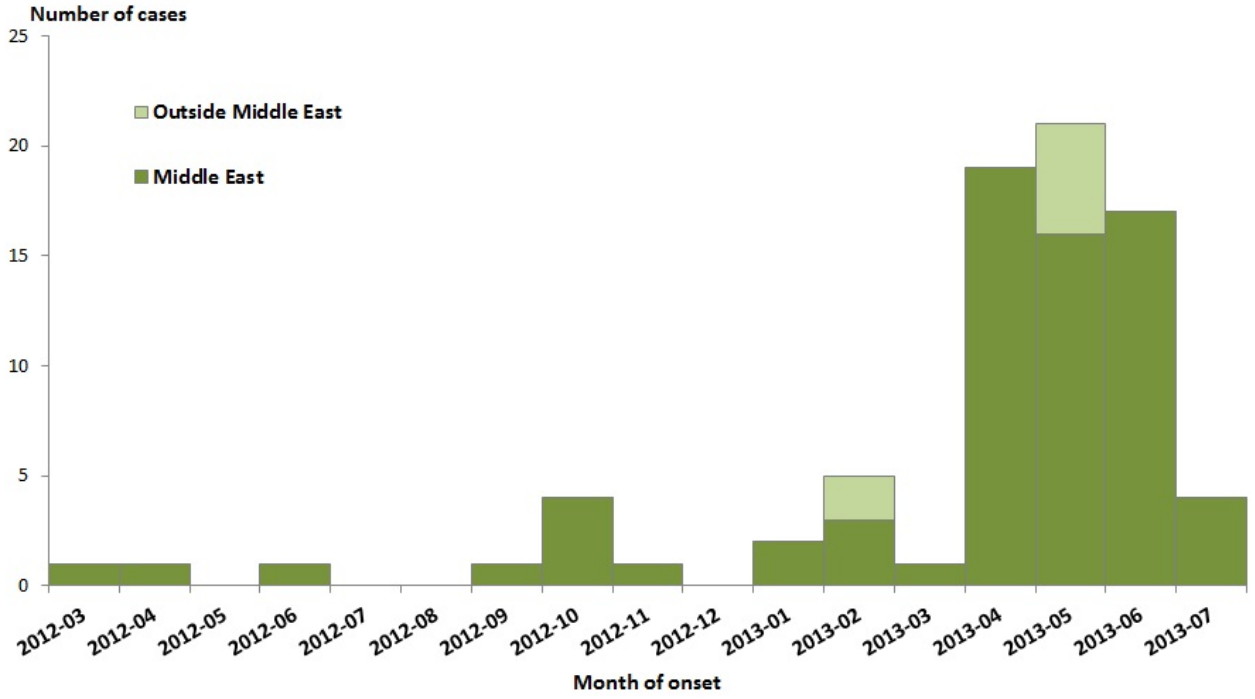
ECDC published a Public Health Development on 12 August 2013 regarding a comparative serological study on MERS in camels and other animals.

ECDC is closely monitoring the situation in collaboration with WHO and the EU Member States.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

Distribution of confirmed cases of MERS-CoV by month of onset and place of probable infection, March 2012 - August 2013 (n=78*)

ECDC *16 cases for which month of onset is missing have been excluded



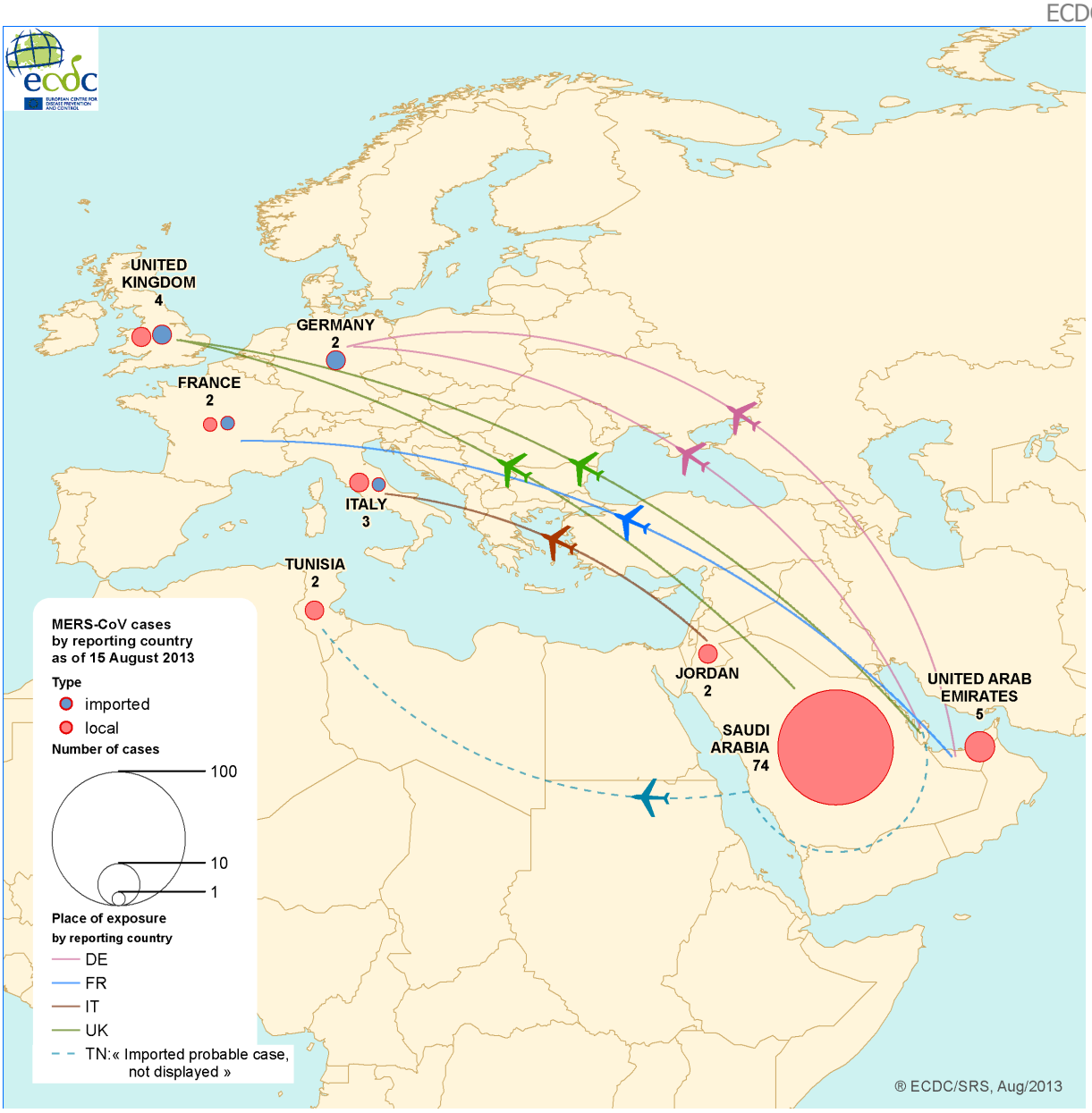
Distribution of confirmed cases of MERS-CoV by month of onset and place of probable infection, March 2012 - August 2013 (n=82*)

ECDC *12 cases for which age or sex data is missing have been excluded

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

Distribution of confirmed cases of MERS-CoV by place of reporting as of 15 August

ECDC SRS



Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 15 August 2013

Epidemiological summary

On 31 March 2013, Chinese authorities announced the identification of a novel reassortant A(H7N9) influenza virus isolated from three unlinked fatal cases of severe respiratory disease in eastern China in two separate provinces, two in Shanghai and one in Anhui province. The WHO Collaborating Centre for Reference and Research on Influenza at the Chinese Centre for Disease Control and Prevention (CCDC) subtyped and sequenced the viruses and found them to be of almost identical low pathogenic avian origin.

Since 31 March 2013, 135 cases of human infection with influenza A(H7N9) have been reported from eastern China and Taiwan: Zhejiang (46 cases), Shanghai (34), Jiangsu (27), Henan (4), Anhui (4), Beijing (2), Shandong (2), Fujian (5), Hunan (3), Jiangxi (5), Hebei (1), Guangdong (1) and Taiwan (1). In addition, the virus has been detected in one asymptomatic case in Beijing. The dates of onset of disease have been between 19 February and 27 July 2013. The date of disease onset is currently unknown for fifteen patients. Most cases have developed severe respiratory disease. Forty-four patients have died (case-fatality ratio=33%). The median age is 58 years, ranging between four and 91 years; 39 of 135 patients are female, gender is unknown

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

in five cases.

The Chinese health authorities responded to this public health event with enhanced surveillance, epidemiological and laboratory investigation and contact tracing. The animal health sector has intensified investigations into the possible sources and reservoirs of the virus. The authorities reported to the World Organisation for Animal Health (OIE) that avian influenza A(H7N9) was detected in samples from pigeons, chickens and ducks, and in environmental samples from live bird markets ('wet markets') in Shanghai, Jiangsu, Anhui, Zhejiang and Hebei provinces. Authorities have closed markets and culled poultry in affected areas.

Web sources: Chinese CDC | WHO | WHO FAQ page | OIE | Chinese MOA |

ECDC assessment

Influenza A(H7N9) is a zoonotic disease that has spread in poultry in parts of eastern China, causing severe disease in humans. There is no evidence of sustained person-to-person transmission. Close to 3 000 contacts have been followed-up, and only a few are reported to have developed symptoms, as part of three small family clusters.

The most immediate threat to EU citizens is to those in China, who are strongly advised to avoid live bird markets. The risk of the disease spreading to Europe via humans in the near future is considered low. However, it is likely that people presenting with severe respiratory infection in the EU and a history of potential exposure in the outbreak area will require investigation in Europe.

There is no specific guidance on blood or tissue donor deferral for exposure to avian influenza. The incubation period for A(H7N9) is assumed to be 10 days or less, and there is no reason to believe that infected people will be viraemic beyond the acute disease episode. Therefore, the risk of transmission through blood transfusion can be considered very low in the context of the current donor selection procedures.

The decline in the number of cases is possibly due to the closure of urban live bird markets in China. The fact that human infections with bird flu viruses tend to drop off during spring and summer in affected countries could also play a role. However, many unanswered questions remain regarding this outbreak, e.g. the reservoir, the route of transmission, the spectrum of disease and the reason for the unusual age–gender imbalance.

It is not possible to determine at this point whether this case marks the resurgence of the outbreak. The new case reported does not change ECDC's assessment.

Actions

ECDC is closely monitoring developments.

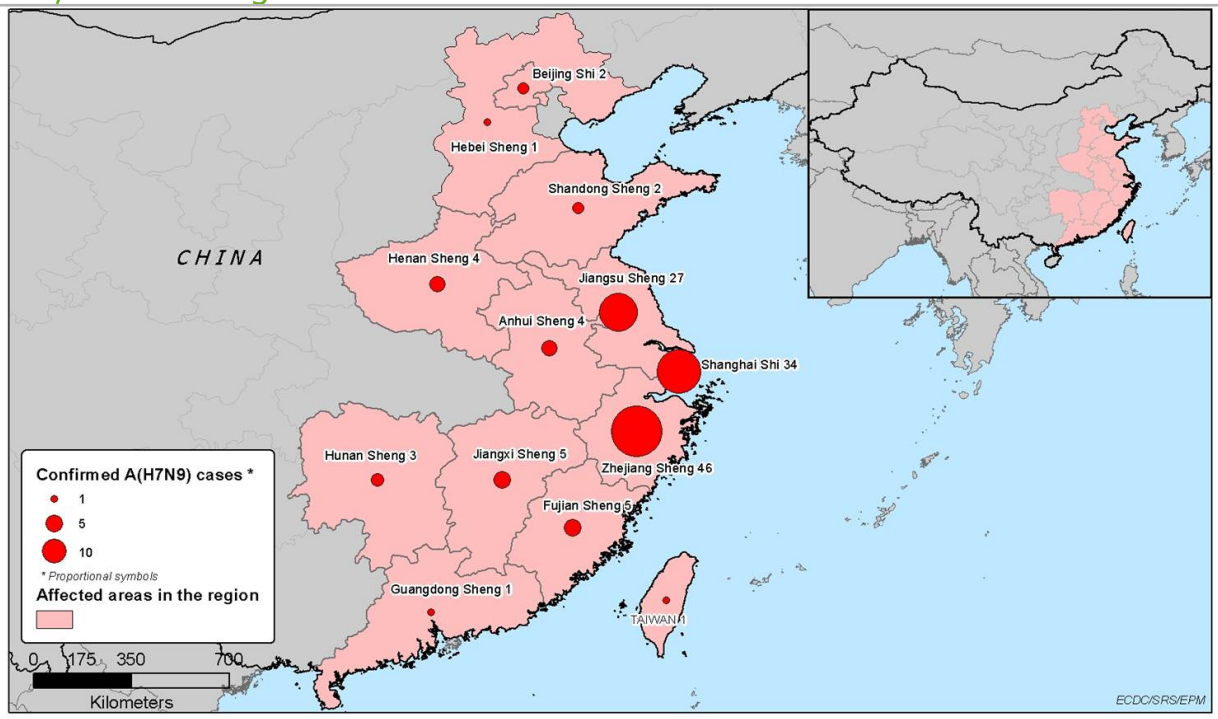
ECDC published an updated Rapid Risk Assessment on 8 May 2013.

A case detection algorithm and an EU case definition has been developed and shared with EU Member States.

ECDC guidance for Supporting diagnostic preparedness for detection of avian influenza A(H7N9) viruses in Europe for laboratories was published on 24 April 2013.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

Reported cumulative number of confirmed cases of novel influenza A(H7N9) by province in China, as of 13 August 2013



Influenza A(H5N1) - Multistate (world) - Monitoring human cases

Opening date: 15 June 2005 Latest update: 19 July 2013

Epidemiological summary

Between 26 July and 9 August 2013, WHO WPRO acknowledged three new laboratory-confirmed human cases with influenza A(H5N1) virus infection from Cambodia.
The first case is a three-year-old boy from Prey Veng province who was diagnosed on 10 July 2013. He is in a stable condition.
The second case is a nine-year-old boy from Battambang province who was diagnosed on 9 August 2013. The boy had had contact with infected poultry. He is currently in a stable condition.
The third case is a five-year-old girl from Kandal province who was diagnosed on 10 August 2013. The girl is in a critical condition.

Of the 24 cases reported worldwide since the beginning of the year, 14 cases are from Cambodia (including nine deaths).

Web sources: ECDC Rapid Risk Assessment | Avian influenza on ECDC website | WHO updates | WPRO updates

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

ECDC assessment

Hong Kong reported the world's first recorded major outbreak of bird flu among humans in 1997, when six people died. Most human infections are the result of direct contact with infected birds, and countries with large poultry populations in close contact with humans are considered to be most at risk of bird flu outbreaks. ECDC follows the worldwide A(H5N1) situation through epidemic intelligence activities in order to identify significant changes in the epidemiology of the virus. ECDC re-assesses the potential of a changing risk for A(H5N1) to humans on a regular basis. There are currently no indications that there is any significant change in the epidemiology associated with any clade or strain of the A(H5N1) virus from a human health perspective. This assessment is based on the absence of sustained human-to-human transmission, and on the observation that there is no apparent change in the size of clusters or reports of chains of infection. However, vigilance for avian influenza in domestic poultry and wild birds in Europe remains important.

Actions

WHO is now reporting H5N1 cases on a monthly basis. ECDC will continue monthly reporting in the CDTR to coincide with WHO reporting.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu