

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: 12 September 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. During the 2012 season, 244 probable and confirmed cases were reported in the EU, and 693 cases in neighbouring countries.

→Update of the week

During 6-12 September, 33 new WNF cases were detected in the EU: 10 from Croatia, eight from Greece, eight from Hungary and seven from Italy.

In neighbouring countries, 72 new cases were reported from the following countries: Serbia (58), Israel (9), Russia (4) and Bosnia and Herzegovina (1).

#### Avian influenza (H7N7) - Italy - 2013

Opening date: 5 September 2013

Latest update: 11 September 2013

An outbreak of avian influenza (H7N7) in poultry has been reported in the region of Emilia Romagna, in Italy since August 2013. An active surveillance system has been implemented for all workers exposed to sick animals, and to their close contacts.

→Update of the week

A third human case of conjunctivitis due to the H7N7 avian influenza virus, was confirmed in Emilia Romagna, Italy on 10 September 2013.

## Non EU Threats

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

Opening date: 24 September 2012

Latest update: 12 September 2013

Between April 2012 and 12 September 2013, 132 laboratory-confirmed cases, including 57 deaths, of acute respiratory disease caused by Middle East respiratory syndrome coronavirus (MERS-CoV), have been reported by national health authorities. MERS-CoV is genetically distinct from the coronavirus that caused the SARS outbreak. To date, all cases have either occurred in the Middle East or have had direct links to a primary case infected in the Middle East.

→Update of the week

Between 6 and 12 September, 21 new cases have been reported by national health authorities. Twenty cases were reported in Saudi Arabia, including five deaths, and the primary case from the Tunisian cluster who passed away on 10th May 2013, was retroactively confirmed by Tunisian health authorities.

### Poliovirus - Israel- Detection of WPV1 in environmental samples and healthy individuals

Opening date: 19 August 2013

Latest update: 10 September 2013

EU/EEA countries, as well as the rest of the WHO European Region, have been officially polio-free since 2002. Wild polio virus type 1 (WPV1) has been isolated in sewage and in the faeces of asymptomatic carriers in Israel since February 2013. Detection of WPV in environmental samples is a signal of WPV transmission and consequently of great concern and highlights the potential for re-establishing transmission in Europe.

→Update of the week

During the week leading up to 13 September 2013, wild polio virus has been discovered for the first time in Jerusalem's waste-water treatment plant. So far, no clinical cases have been seen in Israel.

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

Opening date: 15 June 2005

Latest update: 11 September 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

Since the update of 9 August 2013, WHO has acknowledged one new laboratory-confirmed human case with influenza A(H5N1) virus infection from Cambodia.

## II. Detailed reports

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

Opening date: 3 June 2013

Latest update: 12 September 2013

#### Epidemiological summary

As of 12 September 2013, 139 human cases of West Nile fever have been reported in the EU and 361 cases in neighbouring countries since the beginning of the 2013 transmission season.

#### EU Member States

##### **Croatia**

Croatia has recorded 11 cases of WNV so far this year. Ten new probable cases were reported this week, one case from the newly affected Medimurska county and nine cases from the Zagrebacka county, an area with one previous case report. For all these cases, final laboratory confirmation of results are still pending.

##### **Greece**

Sixty-five cases of West Nile virus (WNV) have been reported in Greece. The regions affected are Attiki (31), Imathia (2), Kavala (7), Thessaloniki (6), Xanthi (14), Kerkyra (1), Serres (1) Ileia (1) and the newly affected Pella (2).

##### **Italy**

Italy has reported 42 cases of WNV. Seven new cases were reported this week, one from the newly affected province of Padova and six from provinces with previous case reports. So far this year, the affected provinces are: Modena (13), Rovigo (9), Mantova (4), Ferrara (5), Reggio nell'Emilia (3), Verona (5), Bologna (2) and Padova (1).

##### **Hungary**

Hungary has reported 11 cases so far this year. The counties affected are Fejer (2), Pest (2), Komaron (1) and the five newly affected counties this week: Békés (1), Budapest (1), Csongrád (1), Hajdú-Bihar (2), Jász-Nagykun-Szolnok (1).

##### **Romania**

Romania has reported ten cases of WNV. The counties affected are Braila (3), Ialomita (2), Iasi (2), Galati (1), Constanta (1) and Tulcea (1).

#### Neighbouring countries

##### **Bosnia and Herzegovina**

The first case of the year was reported in Tuzlansko-podrinjski canton.

##### **Israel**

Fifty-six cases of WNV have been reported in Israel. The affected districts are Central (27), Haifa (17), Tel Aviv (11) and the newly affected Southern district (1)

##### **Montenegro**

Montenegro has reported one case this year in Podgorica region, an area suspected to be affected last year.

##### **Russia**

Russia has reported 124 cases of WNF from ten oblasts and one republic in Russia: Adygeya oblast (1), Astrakhanskaya oblast (38), Lipetskaya oblast (2), Rostovskaya oblast (5), Samarskaya oblast (8), Saratovskaya oblast (21), Volgogradskaya oblast (43), Voronezhskaya oblast (2), Belgorodskaya oblast (2) Kaluzhskaya oblast (1) and the newly affected Omskaya oblast (1).

##### **Serbia**

Serbia has reported 177 cases of WNF from eight districts: Grad Beograd (114), Podunavski (7), Sremski (4), Juzno-backi (1), Juzno-banatski (14), Kolubarski (3), Macvanski (1) Branicevski district (1), Jablancki (1), Srednje-banatski (2) and three newly affected districts this week: Severno-banacki (2) Moravicki (1) and Severno-banatski (1).

##### **the former Yugoslav Republic of Macedonia**

One case has been reported in Kocani (Eastern Macedonia).

##### **Ukraine**

The first case for this year was reported in Zhytomyrs'ka oblast.

**Websources:** [ECDC West Nile fever risk maps](#) | [ECDC West Nile fever risk assessment tool](#) | [Volgograd oblast](#) | [Serbia MoH](#) | [Macedonian PH Institute](#) | [Croatia PHI](#) | [Israel MoH](#) |

## ECDC assessment

The 2013 season is progressing in comparable fashion to previous years in the EU and neighbouring countries. 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.

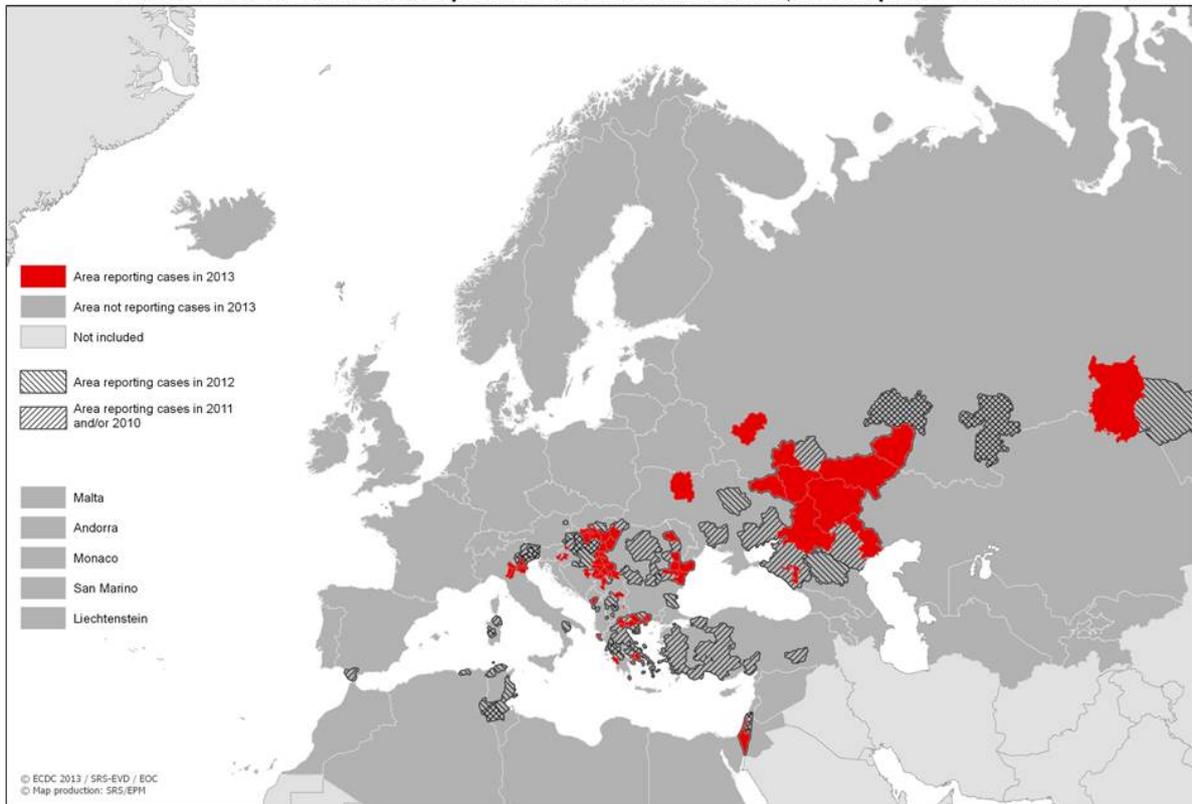
ECDC

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

Transmission season 2013; latest update: 12/09/2013



### Reported cases of West Nile fever for the EU and neighbouring countries Transmission season 2013 and previous transmission seasons; latest update: 12/09/2013



## Avian influenza (H7N7) - Italy - 2013

Opening date: 5 September 2013

Latest update: 11 September 2013

### Epidemiological summary

An outbreak of avian influenza (H7N7) in poultry has been reported in the region of Emilia Romagna, in Italy since August 2013. Three poultry workers from this area have presented clinical signs of conjunctivitis. All three tested positive for H7N7.

The first case is a 51 year old man, with unilateral conjunctivitis. He was diagnosed with H7N7 on 30 August. By 3 September he had recovered. The case was isolated at home, and the four members of his family have been placed under active surveillance for 10 days.

The second case is a 46 years old man, with bilateral conjunctivitis. Isolation measures were taken.

The third case is also a male, working in the same farm as the previous cases. Isolation measures were taken.

Active surveillance has been implemented to all workers exposed to sick animals and their close contacts. The same applies to workers involved in culling operations.

Web source: [Regione Emilia-Romagna](#)

## ECDC assessment

Conjunctivitis in people exposed to poultry infected by avian influenza H7N7 has been well documented in previous outbreaks. Close monitoring of cases is critical to detect further human to human transmission and to subsequently implement prevention measures. Additional information about the risk and measures to take can be found in the following documents: ECDC Guidelines - [Technical report 1](#), [Technical report 2](#)

## Actions

ECDC contacted Italy for more information about this event and the measures taken.

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

Opening date: 24 September 2012

Latest update: 12 September 2013

### Epidemiological summary

As of 12 September 2013, 132 laboratory-confirmed cases of MERS-CoV, including 57 deaths worldwide have been reported by national health authorities. All cases have either occurred in the Middle East or have had direct links to a primary case infected in the Middle East.

As of 12 September 2013 Saudi Arabia has reported 108 symptomatic or asymptomatic cases including 47 deaths, Jordan two cases, who both died, United Arab Emirates five cases including one fatality and Qatar three cases including one fatality. The reason for some discrepancy between the number of cases reported for Saudi Arabia here and in the official Saudi Ministry of Health website area is unclear and is being investigated.

Fourteen cases have been reported from outside the Middle East: in the UK (4), Italy (3), France (2), Germany (2) and Tunisia (3). 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 possible nosocomial outbreak in Al-Ahsa, Saudi Arabia, secondary transmission has been limited. Seventeen asymptomatic cases were reported by Saudi Arabia and two by the UAE. Eight of these cases were healthcare workers.

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.

On 21 August 2013, WHO published a [joint report](#) of a mission to Riyadh, 4-9 June 2013 together with Saudi Arabia on Middle East respiratory syndrome coronavirus.

**Web sources:** [ECDC RRA Update 22 July](#) | [ECDC novel coronavirus webpage](#) | [WHO](#) | [WHO MERS updates](#) | [WHO travel health update](#) | [WHO Euro MERS updates](#) | [CDC MERS](#) | [Saudi Arabia MoH](#) | [Qatar SCH](#) | [Eurosurveillance article](#)

## 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. Recent published studies are making relevant progresses to identify this source of infection. 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 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

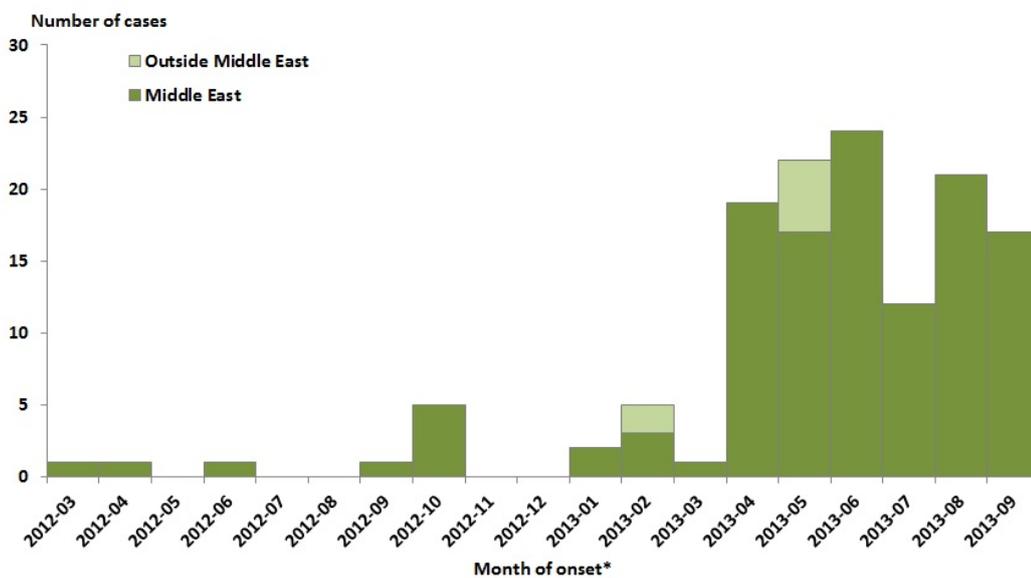
The latest ECDC [rapid risk assessment](#) was published on 22 July 2013. The risk assessment is currently being updated.

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 27 August 2013 regarding the isolation of MERS-CoV from a bat sample.

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

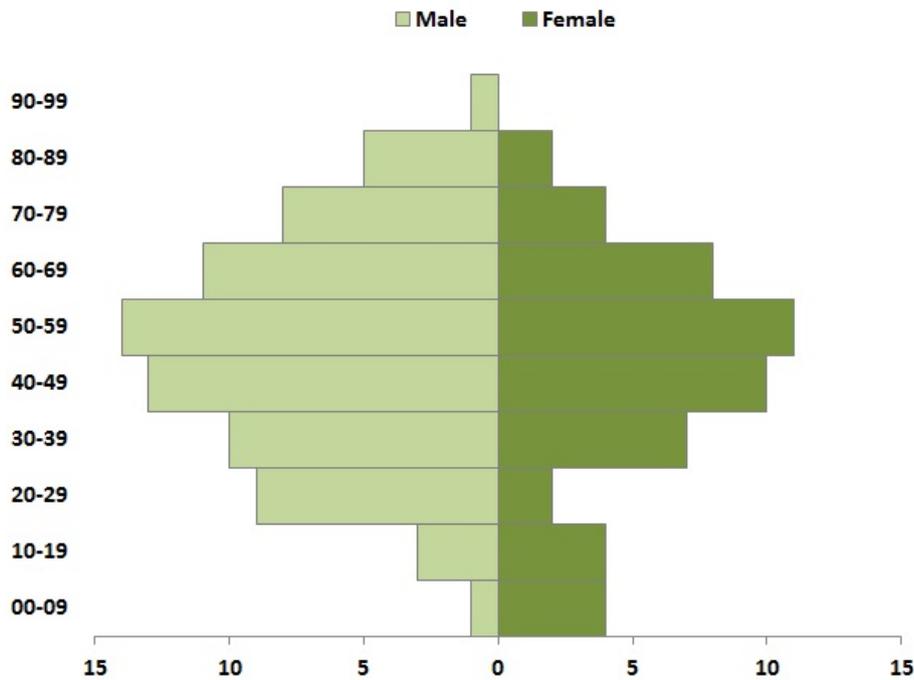
## Distribution of confirmed cases of MERS-CoV by month\* and place of probable infection, March 2012 - 12 September 2013 (N=132\*\*)



\* Where the month of onset is unknown the month of reporting has been used.

\*\* This epicurve includes 19 asymptomatic cases.

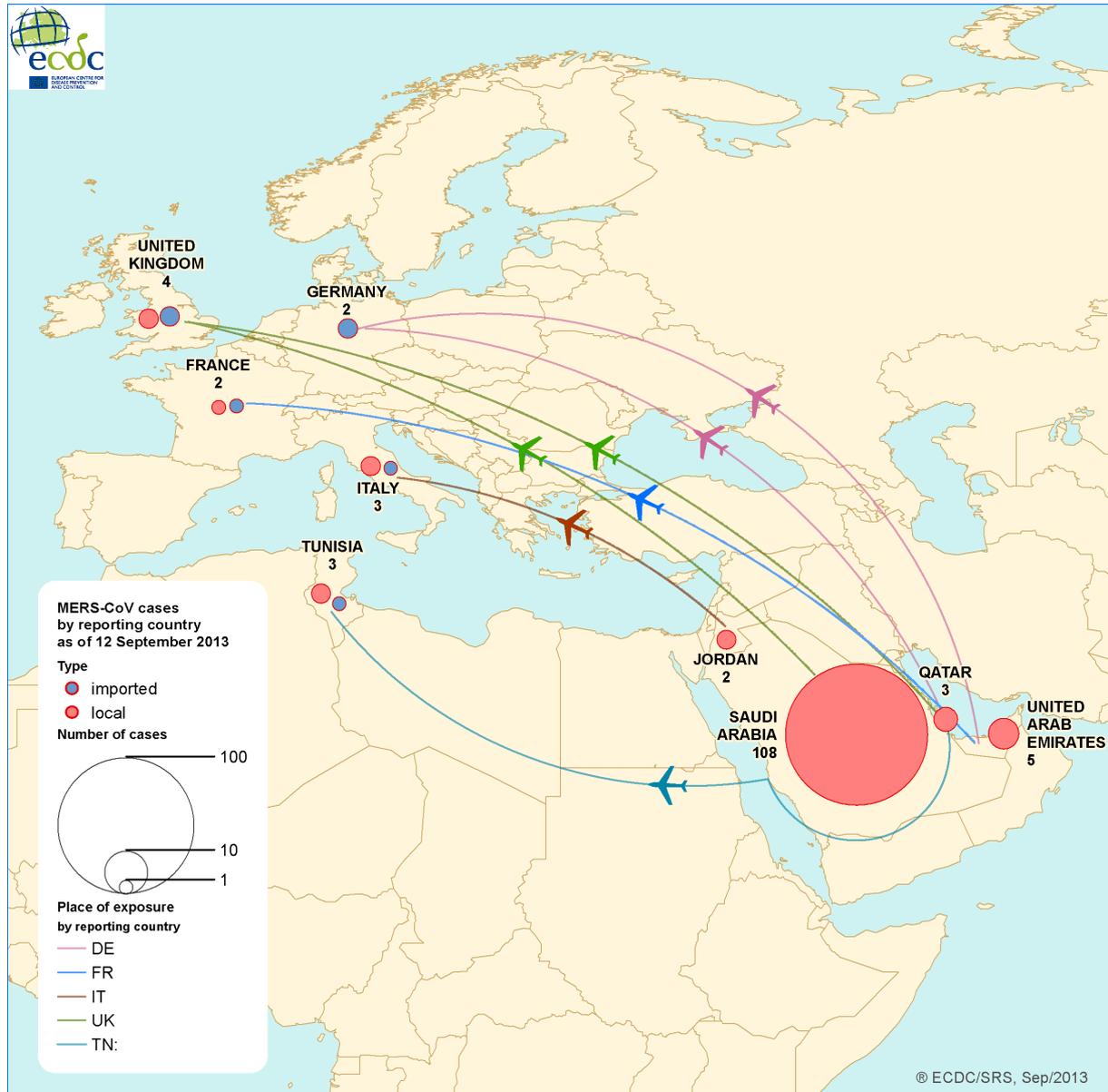
## Distribution of confirmed cases of MERS-CoV, March 2012 - 12 September 2013 (n=127\*)



\*5 cases for which age or sex data is missing have been excluded

## Distribution of MERS-CoV cases by place of reporting as of 12 September 2013

ECDC SRS



## Poliovirus - Israel- Detection of WPV1 in environmental samples and healthy individuals

Opening date: 19 August 2013

Latest update: 10 September 2013

### Epidemiological summary

On 9 April 2013, wild poliovirus type 1 (WPV1) was isolated from sewage samples in Rahat, southern Israel. WPV1 has been detected in nearly hundred sewage samples from all across Israel since then, indicating widespread transmission throughout the country. In addition, as part of subsequent on-going stool sample survey activities, WPV1 has also been isolated in stool samples from 42 asymptomatic carriers, representing 4.4% of all collected samples. No cases of paralytic polio have been reported in the country. Israel has been free of indigenous WPV transmission since 1988. In the past, wild poliovirus has been detected in environmental samples collected in this region between 1991 and 2002 without occurrence of cases of paralytic polio in the area.

Two positive samples have been collected from the West Bank and Gaza, the former on 30 June and the latter on 20 August. Previous and subsequent specimens collected through environmental surveillance since 2002 in both Gaza and the West Bank have consistently tested negative for the presence of WPV. No case of paralytic polio has been reported in either Israel or The West Bank and Gaza. The strain is related to strains circulating in Pakistan and also to the strain detected in sewage from

9/12

Cairo in December 2012. It is unrelated to the polioviruses circulating in the Horn of Africa.

Sources: [MoH Israel](#) | [WHO DON](#)

## ECDC assessment

The World Health Organization (WHO) estimates the risk of further international spread of wild poliovirus type 1 (WPV1) from Israel to remain moderate to high. ECDC is preparing a risk assessment on the situation in Israel, Somalia and the region. The risk assessment will consider the risk of importation of wild poliovirus to the EU, and the risk of transmission within the EU.

## Actions

Nationwide measures to prevent cases of poliomyelitis and stop the environmental spread of the virus have been adopted in Israel, including a supplementary immunisation activity (SIA) with bivalent oral polio vaccine (OPV1 and 3) with the aim to boost mucosal immunity levels in cohorts of children naïve to OPV to rapidly interrupt virus circulation.

ECDC supports WHO recommendations that all countries, in particular those with frequent travel and contacts with polio-infected countries, strengthen surveillance for cases of acute flaccid paralysis (AFP), in order to rapidly detect new poliovirus importations and facilitate a rapid response. Countries should also analyse routine immunisation coverage data to identify subnational gaps in population immunity to guide catch-up immunisation activities and thereby minimise the consequences of new virus introduction. Priority should be given to areas at high risk of importations and where OPV3/DPT3 coverage is <80%. All travellers to and from polio-infected areas should be fully vaccinated against polio. Three countries remain endemic for indigenous transmission of WPV: Nigeria, Pakistan and Afghanistan. Additionally, in 2013, the Horn of Africa is affected by an outbreak of WPV .

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

Opening date: 15 June 2005

Latest update: 11 September 2013

### Epidemiological summary

Between 9 August and 12 September 2013, WHO acknowledged one new laboratory-confirmed human case with influenza A(H5N1) virus infection from Cambodia.

The new case is a six year old boy from Kandal province and was diagnosed on 21st July 2013. The boy had contact with sick poultry. WHO confirms that Influenza A(H5N1) virus is circulating widely in poultry in Cambodia and therefore additional sporadic human cases or small clusters might be expected in the future.

According to WHO, from 2003 through to 29 August 2013, 637 laboratory-confirmed human cases with avian influenza A(H5N1) virus infection have been officially reported from 15 countries, of which 378 have died.

Web sources: [ECDC Rapid Risk Assessment](#) | [Avian influenza on ECDC website](#) | [WHO updates](#) | [WPRO updates](#)

## 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

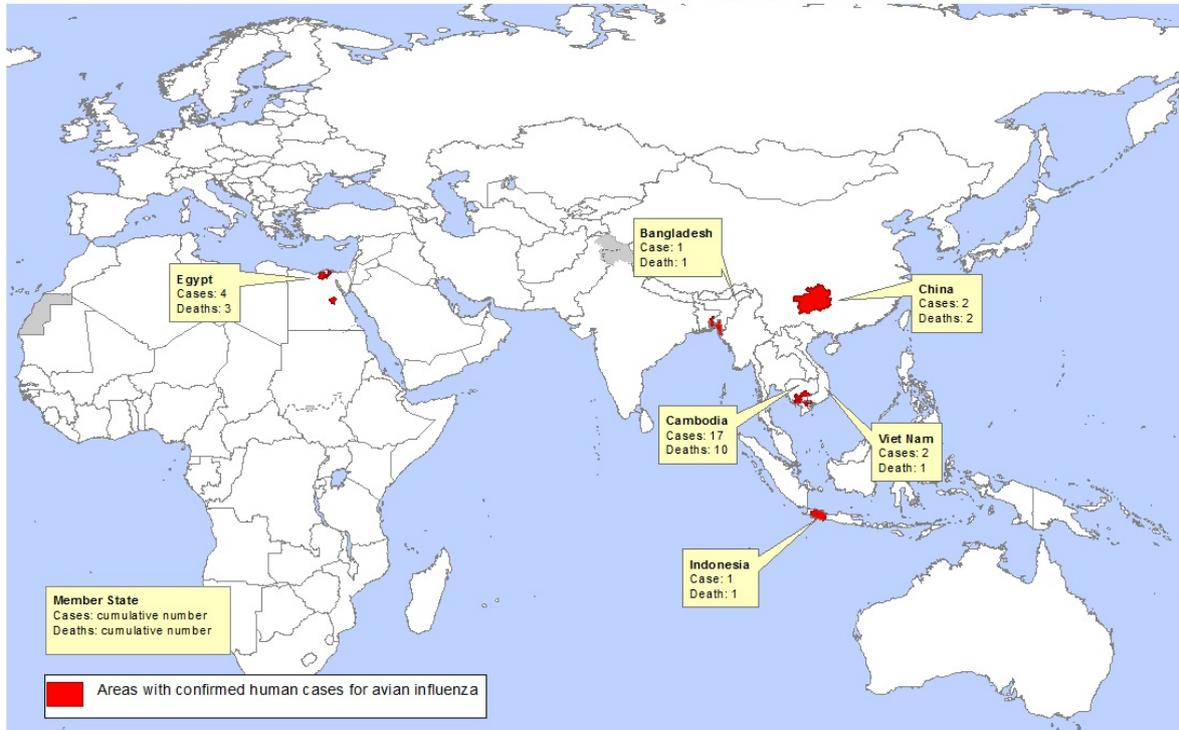
WHO is now reporting H5N1 cases on a monthly basis. ECDC will continue monthly reporting in the CDTR to coincide with WHO

10/12

reporting.

WHO

Areas with confirmed human cases for avian influenza A(H5N1) reported to WHO, 2013- to-date\*



\*All dates refer to onset of illness  
Data as of 29 August 2013  
Source: WHO/GIP

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