**COMMUNICABLE DISEASE THREATS** REPORT

# CDTR
# Week 41, 07-11 October 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: 10 October 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. As of 10 October 2013, 217 human cases of West Nile fever have been reported in the EU and 509 cases in neighbouring countries since the beginning of the 2013 transmission season.

Update of the week

During the past week, 14 new cases were detected in the EU: five from Italy, four from Romania, three from Greece and two from Hungary. In neighbouring countries, 26 new cases were reported: Serbia (22), Israel (3) and Bosnia and Herzegovina (1).

### Influenza - Multistate (Europe) - Monitoring 2013-2014 season

Opening date: 4 October 2013

Following the 2009 pandemic, influenza transmission in Europe has returned to its seasonal epidemic pattern, with peak activity seen during winter months. ECDC monitors influenza activity in Europe during the winter seasons and publishes the results on its website in the Weekly Influenza Surveillance Overview.

Weekly reporting on influenza surveillance in Europe for the 2013-2014 season starts this week.

Update of the week

During the first week of the influenza surveillance season in week 40, all 26 reporting countries experienced low intensity of clinical influenza activity.

## Non EU Threats

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

Opening date: 24 September 2012 Latest update: 10 October 2013

Since April 2012, 141 laboratory-confirmed cases, including 62 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 4 and 10 October 2013, two new cases have been reported by the national health authorities of Saudi Arabia



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## Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 3 October 2013

Polio, a crippling and potentially fatal vaccine-preventable disease affecting mainly children under the age of five, is close to being eradicated from the world after a significant global public health investment and effort. Outbreaks, such as the one currently affecting the Horn of Africa, pose serious challenges to this goal.

Update of the week

Three new polio cases were reported to the World Health Organization during the past week from Pakistan, all of which were wild poliovirus type 1 (WPV1).

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

Opening date: 15 June 2005 Latest update: 10 October 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 beginning of the year, WHO has acknowledged 30 laboratory-confirmed human cases with influenza A(H5N1) virus infection worldwide.



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# II. Detailed reports

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

Opening date: 3 June 2013 Latest update: 10 October 2013

### Epidemiological summary

As of 10 October 2013, 217 human cases of West Nile fever have been reported in the EU and 509 cases in neighbouring countries since the beginning of the 2013 transmission season.

**EU Member States**

**Croatia**

Croatia has recorded 14 cases of West Nile virus (WNV) so far this year. The affected areas are Zagrebacka county (8), Medimurska county (1) and Zagreb (5).

**Greece**

Eighty-six cases of WNV have been reported in Greece. The regions affected are Attiki (36), Imathia (3), Kavala (11), Thessaloniki (6), Xanthi (16), Kerkyra (1), Serres (8) Ileia (1), Pella (4).

Italy

Italy has reported 66 cases (37 neuroinvasive and 29 non-neuroinvasive) of WNV. The provinces affected are Modena (16), Rovigo (10), Verona (6), Reggio Emilia (5), Mantova (6), Bologna (2), Padova (1), Ferrara (6), Parma (3), Cremona (2), Treviso (4), Venezia (2), Foggia (1) and two newly affected provinces Lodi (1) and Brescia (1).

**Hungary**

Hungary has reported 29 cases so far this year. The counties affected are: Fejer (2), Pest (5), Komaron (1), Békés (2), Budapest (6), Csongrád (3), Hajdú-Bihar (2), Jász-Nagykun-Szolnok (3), Heves (3), Bács-Kiskun (1) and the newly affected Szabolcs-Szatmár-Bereg (1).

**Romania**

Romania has reported 22 cases of WNV. The counties affected are Braila (4), Ialomita (3), Iasi (2), Galati (2), Constanta (2), Tulcea (3), Bucuresti (2), Ilof (1) Mures (1) and the newly affected Bacau (2).

**Neighbouring countries**

**Bosnia and Herzegovina**

Three cases of WNF have been reported so far this year, two cases in Tuzlansko-podrinjski canton and one case in the newly affected canton of Modrica.

**Israel**

Fifty-nine cases of WNV have been reported in Israel. The affected districts are Central (28), Haifa (18), Tel Aviv (12) and the Southern district (1)

**Montenegro**

Montenegro has reported two cases to date. One case in Podgorica region, an area suspected to be affected last year. The second case was recorded in the Cetinje region.

**Serbia**

Serbia has reported 260 cases of WNF from eight districts: Grad Beograd (155), Podunavski (14), Sremski (10), Juzno-backi (8), Juzno-banatski (45), Kolubarski (10), Macvanski (3) Branicevski district (2), Jablancki (1), Srednje-banatski (4), Severno-banacki (3) Moravicki (2), Severno-banatski (1), Zapadno-backi (1) and Zlatiborski district (1).

**the former Yugoslav Republic of Macedonia**

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

**Russia**

Russia has reported 177 cases of WNF from ten oblasts and one republic in Russia: Adygeya oblast (1), Astrakhanskaya oblast (69), Lipetskaya oblast (2), Rostovskaya oblast (8), Samarskaya oblast (9), Saratovskaya oblast (30), Volgogradskaya oblast (49), Voronezhskaya oblast (4), Belgorodskaya oblast (2) Kaluzhskaya oblast (1), Omskaya oblast (1) and Orenburgskaya oblast (1).

**Ukraine**



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

**Tunisia**
Tunisia has reported six cases since the beginning of the transmission season in July. The five affected governorates are Gabes (2), Mahdia (1), Monastir (1), Nabeul (1) and Sousse (1).

**Web sources:** 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 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.



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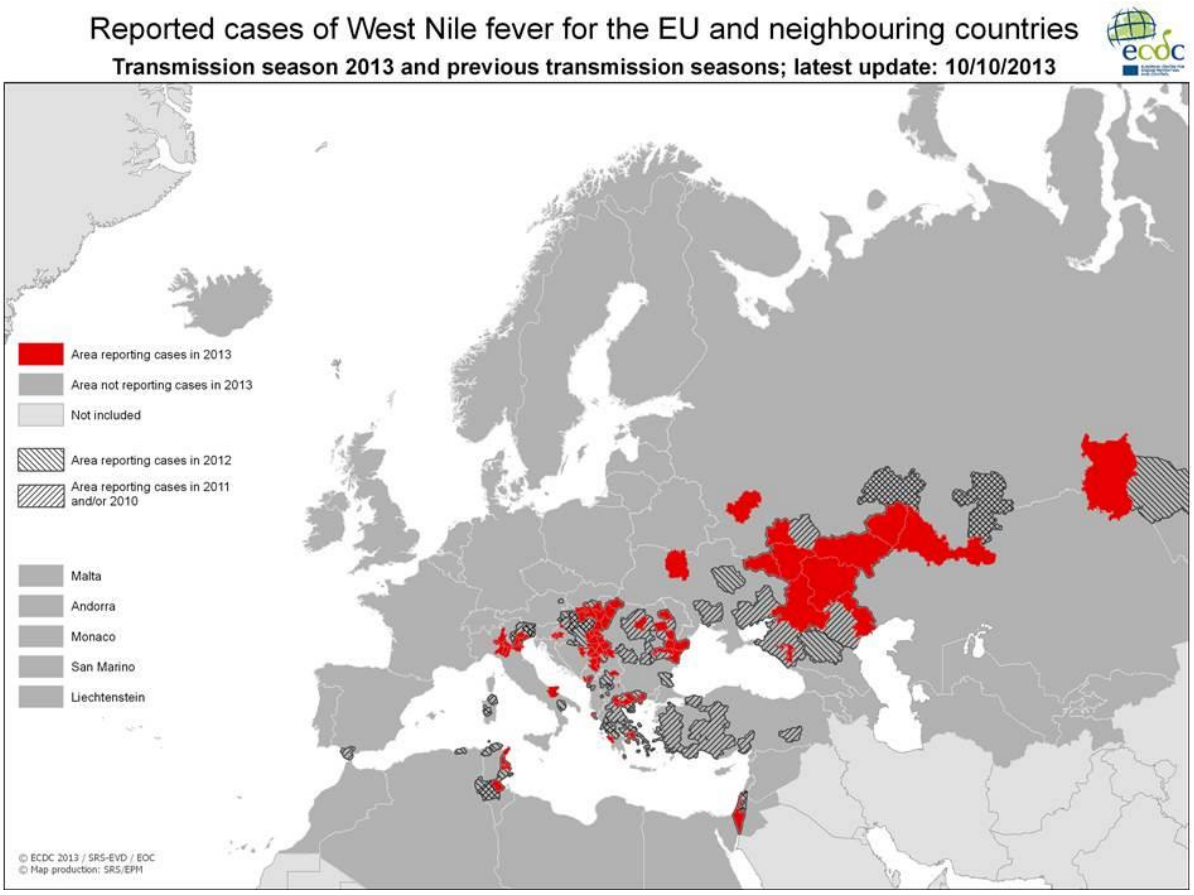


## Influenza - Multistate (Europe) - Monitoring 2013-2014 season

Opening date: 4 October 2013

### Epidemiological summary

Week 40/2013 was the first week of the influenza surveillance season. During week 40/2013:

- All 26 reporting countries experienced low intensity of clinical influenza activity, 22 countries no geographic spread and 21 countries stable or decreasing trends.
- Of 132 sentinel specimens tested by 23 countries, 2% were positive for influenza
- One case hospitalised laboratory-confirmed influenza case was reported by Ireland

### ECDC assessment

During the first week of the influenza season, there was no evidence of influenza activity in Europe.

### Actions

ECDC will be producing the weekly influenza surveillance overview on a weekly basis.



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

Opening date: 24 September 2012 Latest update: 10 October 2013

As of 10 October 2013, there have been 141 laboratory-confirmed cases of MERS-CoV worldwide, including 62 deaths. All cases have either occurred in the Middle East or have had direct links to a primary case infected in the Middle East.

Saudi Arabia has reported 119 symptomatic or asymptomatic cases including 51 deaths, Jordan two cases, who both died, United Arab Emirates five cases, including one fatality and Qatar three cases, including two deaths.

Twelve cases have been reported from outside the Middle East: in the UK (4), France (2), Tunisia (3), Germany (2) and Italy (1). There have been no cases reported from outside the Arabian peninsula since 1 June 2013.

In France, Tunisia and the United Kingdom, there has been local transmission among patients who have not been to the Middle East but have been in close contact with laboratory-confirmed or probable cases. Person-to-person transmission has occurred both among close contacts and in healthcare facilities. However, with the exception of a possible nosocomial outbreak in Al-Ahsa, Saudi Arabia, secondary transmission has been limited. Sixteen asymptomatic cases were reported by Saudi Arabia and two by the UAE. Seven 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. This year, the pilgrimage takes place from 13 to 18 October.

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

On 18 September WHO has issued an interim recommendation to laboratories and stakeholders involved in laboratory testing for Middle East respiratory syndrome coronavirus (MERS-CoV).

The WHO third meeting of the Emergency Committee on 25 September 2013 concluded that the conditions for a Public Health Emergency of International Concern (PHEIC) have not at present been met.

Web sources: ECDC RRA Update 26 September | 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 | Eurosurveillance article 26 September

## 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. The source of infection and the mode of transmission have not been identified.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 26 September 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 27 August 2013 regarding the isolation of MERS-CoV from a bat sample.

The first 133 cases are described in EuroSurveillance published on 26 September 2013.

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



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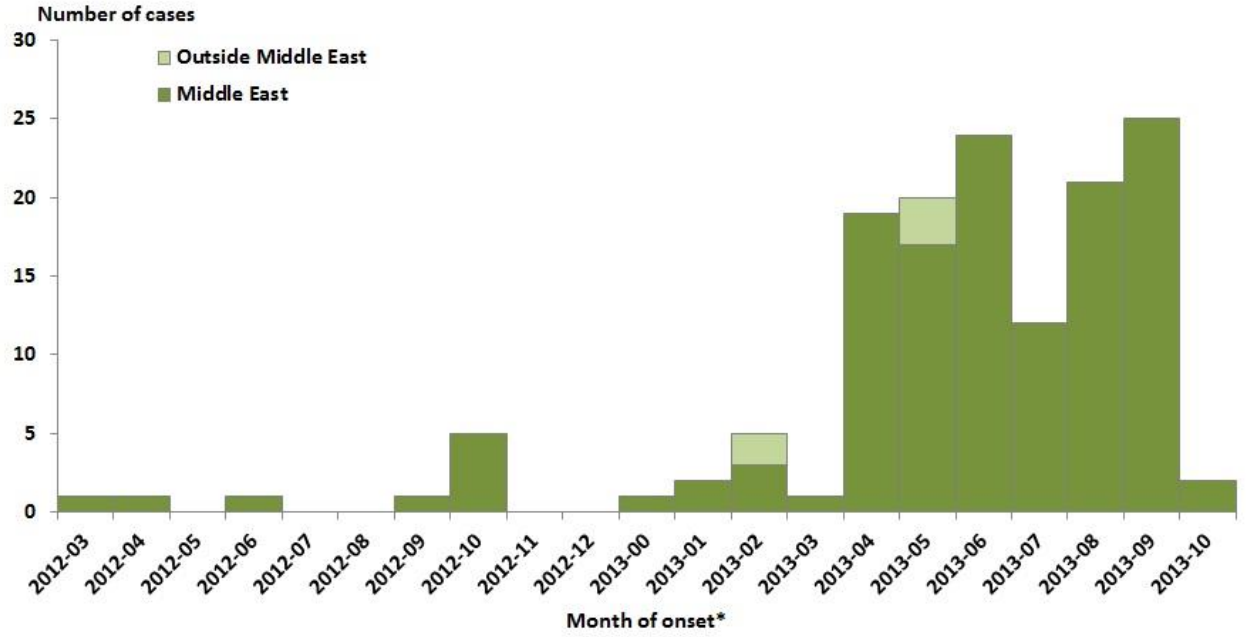
## Distribution of confirmed cases of MERS-CoV by month* and place of probable infection, March 2012 - 10 October 2013 (N=141)

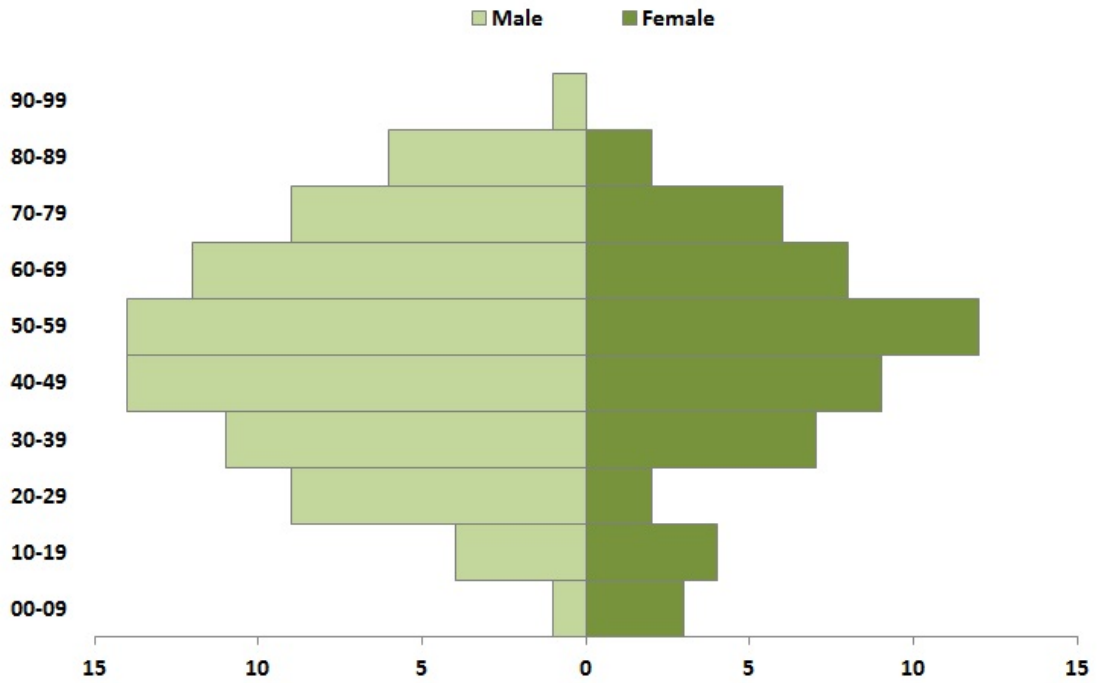
ECDC SRS




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

## Distribution of confirmed cases of MERS-CoV by age and gender, March 2012 - 10 October 2013 (n=134*)

ECDC SRS




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



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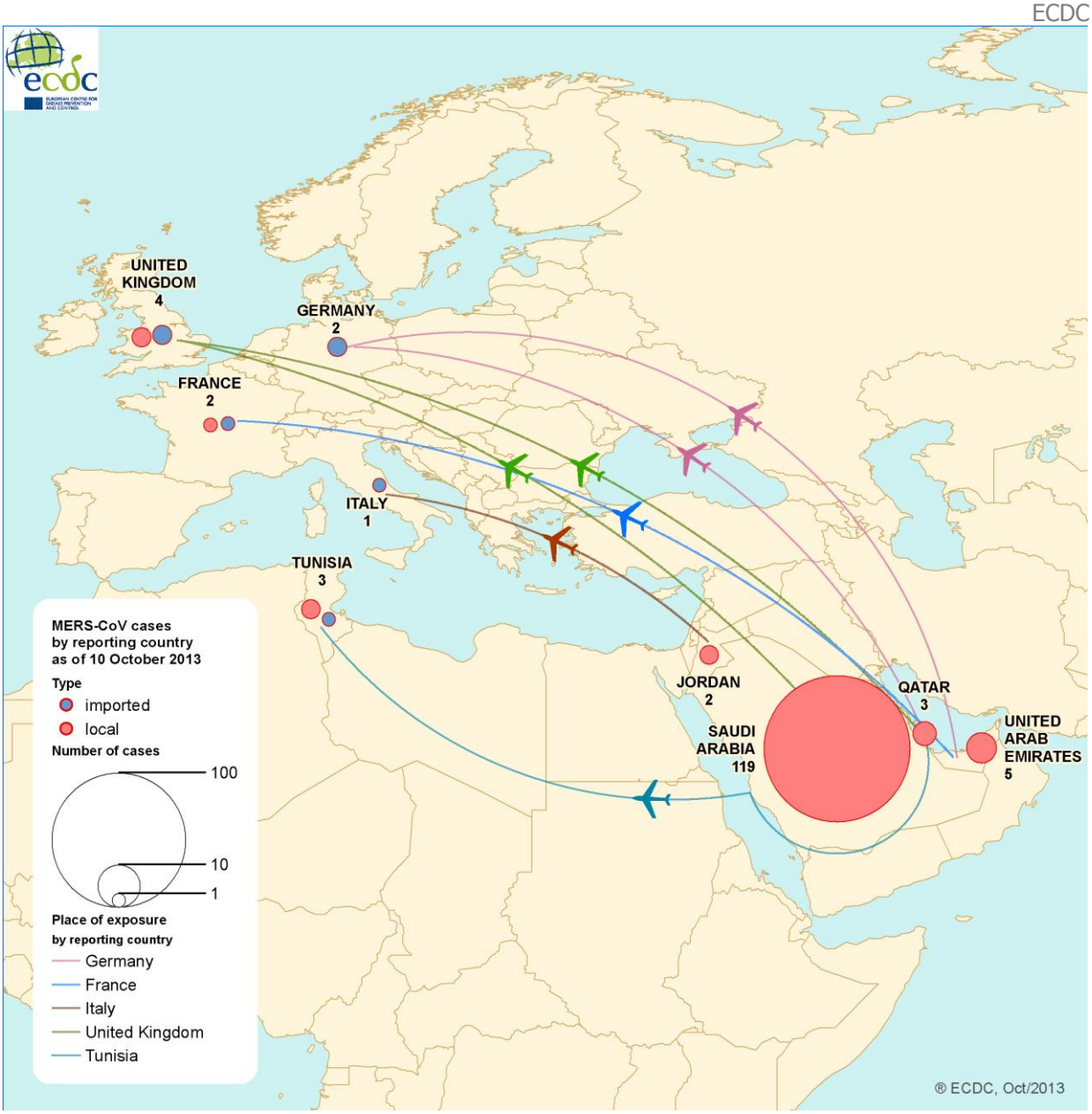
## Distribution of MERS-CoV cases by place of reporting as of 10 October 2013

ECDC SRS




# Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 3 October 2013

## Epidemiological summary

Worldwide, as of 10 October 2013, 285 cases of poliomyelitis have been notified to WHO compared with 162 for the same period in 2012. Seven countries have recorded cases in 2013: Afghanistan (6), Pakistan (39), Nigeria (49), Somalia (170), Kenya (14) Ethiopia (4) and South Sudan (3).

In the past week, three cases of WPV1 were reported from Pakistan. No new WPV cases were reported from the Horn of Africa. Ethiopia and Somalia have deployed permanent vaccination points at all major entry points.

In August 2013, although no case of paralytic polio has been reported, WPV1 has been detected in 96 sewage samples from 27 sampling sites in Israel. During last week, following a consultation with the country's immunisation advisory group, the Israeli Ministry of Health has decided to re-introduce oral polio vaccine (OPV) into the national immunisation schedule in addition to inactivated polio vaccine (IPV).



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Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet | WHO mission to Israel | Somalia Humanitarian Bulletin

## ECDC assessment

The last polio cases in the EU occurred in 2001 in Bulgaria with a WPV that originated from India. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when WPV1 imported from Pakistan caused an outbreak of 460 reported cases. The last indigenous WPV case in Europe was in Turkey in 1998. An outbreak in the Netherlands in a religious community opposed to vaccinations caused two deaths and 71 cases of paralysis in 1992.

The recent detection of WPV in environmental samples in Israel is a signal of WPV transmission. This, together with the large on-going outbreak of polio in the Horn of Africa, is of concern and highlights the potential for re-establishing transmission in Europe.

ECDC, as stated in a recently published risk assessment, considers that there is a risk of importation and re-establishment of WPV into the EU via a recently infected person shedding the virus, considering the significant population flow from and to countries where WPV is still circulating, as well as the sub-optimal potential for early detection of the virus in both the environment and the population. The overall threat can be considered to be very low in OPV vaccinees for both poliovirus infection and disease; moderate in IPV-only cohorts for poliovirus infection and low for disease; and high in low or unvaccinated groups for poliovirus infection and moderate for disease. The highest level of risk is posed by the proximity of clustered un- or under-immunised population groups to large populations vaccinated using IPV-only schemes. Sub-optimal hygiene and crowded living conditions may also play a role in facilitating the spread of infection.

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.

## Actions

ECDC follows reports on polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identify events that increase the risk of re-introduction of wild poliovirus into the EU. The threat is followed on a bi-weekly basis.



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

Opening date: 15 June 2005 Latest update: 10 October 2013

## Epidemiological summary

According to the latest WPRO report, there have been 30 laboratory-confirmed human cases with influenza A(H5N1) virus infection since the beginning of the year. The countries affected are Cambodia (20), China (2), Vietnam (2), Bangladesh (1), Indonesia (1) and Egypt (4). Among these cases, 19 have been fatal, most of them in Cambodia (11).

Since 2003 and as of 4 October 2013, the number of influenza A(H5N1) cases reported from 15 countries worldwide is 640 and 379 were fatal (CFR 59.2%). Among the countries with more than 10 reported cases, Cambodia had the highest CFR of 73.1% (30 out of 41).

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 reporting.



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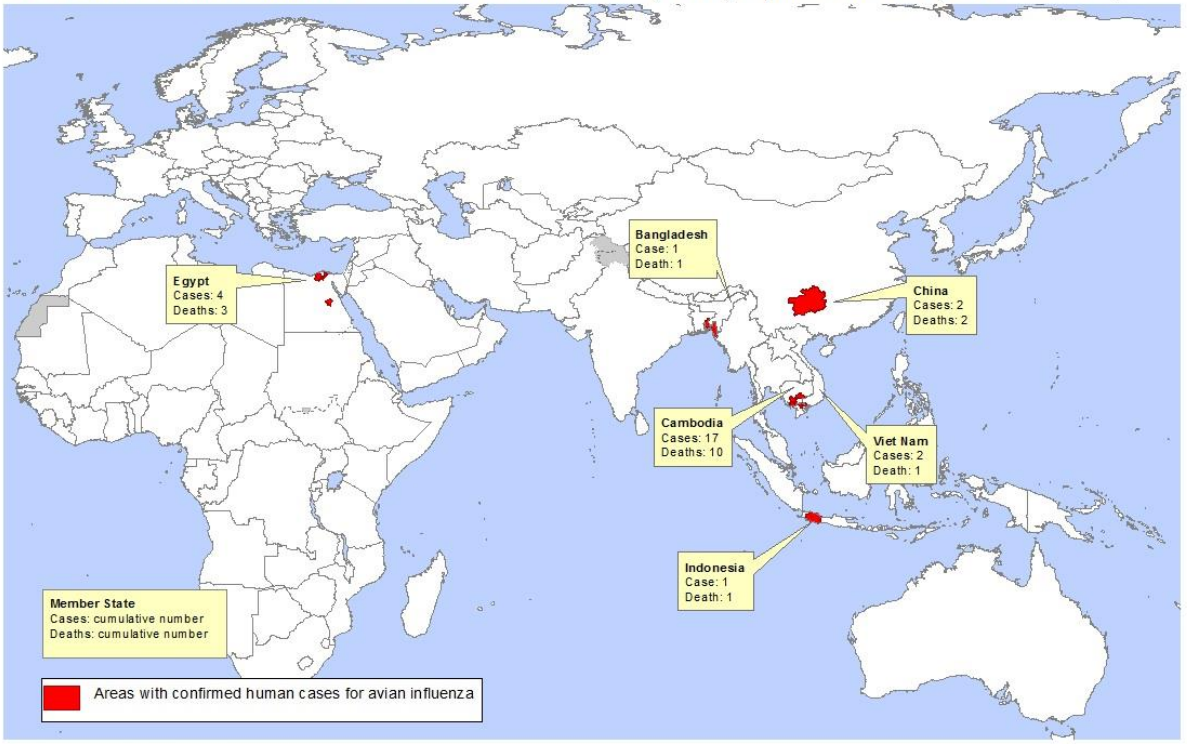
WHO

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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