

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: 3 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. 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 the past week, 14 new cases were detected in the EU: nine from Hungary, three from Greece and two from Italy. In neighbouring countries, 19 new cases were reported: Russia (12), Tunisia (6) and Bosnia and Herzegovina (1).

Non EU Threats

Pertussis - Multistate (EU) - Monitoring European outbreaks

Opening date: 11 July 2013

Latest update: 3 October 2013

During the last three years there has been an increase in the number of reported pertussis cases, with large outbreaks being repeatedly reported in different regions of the world, even in those with sustained high vaccination coverage, including the EU. Due to the re-emergence of pertussis in several EU countries in recent years ECDC has started to monitor the pertussis situation in the EU Member States.

→ Update of the week

No indications of major ongoing outbreaks during September 2013 were detected through the media or available surveillance sources.

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

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

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 3 October 2013

Dengue fever is one of the most prevalent vector-borne diseases in the world, affecting an estimated 50-100 million people each year, mainly in the tropical regions of the world. The identification of sporadic autochthonous cases in non-endemic areas in recent years has already highlighted the risk of locally acquired cases occurring in EU countries where the competent vectors are present. The recent dengue outbreak in the Autonomous Region of Madeira, Portugal in October 2012 further underlines the importance of surveillance and vector control in other European countries.

→Update of the week

So far in 2013, no autochthonous dengue cases have been reported in European countries apart from sporadic cases in Madeira in January.

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

Opening date: 24 September 2012

Latest update: 3 October 2013

Since April 2012, 139 laboratory-confirmed cases, including 60 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 26 September and 3 October 2013, six new cases have been reported by the national health authorities of Saudi Arabia.

II. Detailed reports

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

Opening date: 3 June 2013

Latest update: 3 October 2013

Epidemiological summary

As of 3 October 2013, 203 human cases of West Nile fever have been reported in the EU and 483 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-three cases of WNV have been reported in Greece. The regions affected are Attiki (36), Imathia (3), Kavala (10), Thessaloniki (6), Xanthi (16), Kerkyra (1), Serres (6) Ileia (1), Pella (4).

Italy

Italy has reported 61 cases (35 neuroinvasive and 26 non-neuroinvasive) of WNV. The provinces affected are Modena (16), Rovigo (9), Verona (6), Reggio Emilia (5), Mantova (5), Bologna (2), Padova (1), Ferrara (5), Parma (3), Cremona (2), Treviso (4), Venezia (2) and the newly affected Foggia (1). No cases of WNV were reported from the province of Foggia in 2012.

Hungary

Hungary has reported 27 cases so far this year. The counties affected are: Fejer (2), Pest (5), Komaron (1), Békés (2), Budapest (6), Csongrád (2), Hajdú-Bihar (2), Jász-Nagykun-Szolnok (3), Heves (2), Bács-Kiskun (1) and the newly affected Szabolcs-Szatmár-Bereg (1).

Romania

Romania has reported 18 cases of WNV. The counties affected are Braila (4), Ialomita (3), Iasi (2), Galati (2), Constanta (2), Tulcea (1), Bucuresti (2), Ilof (1) and Mures (1).

Spain

The [Andalusia Ministry of Agriculture](#) in Spain detected four additional horses with West Nile encephalitis this week in the province of Seville (two in the newly affected municipality of Utrera).

Neighbouring countries

Bosnia and Herzegovina

Two cases of WNF have been reported so far this year 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 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 238 cases of WNF from eight districts: Grad Beograd (144), Podunavski (13), Sremski (9), Juzno-backi (4), Juzno-banatski (40), 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.

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

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).

Websites: [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

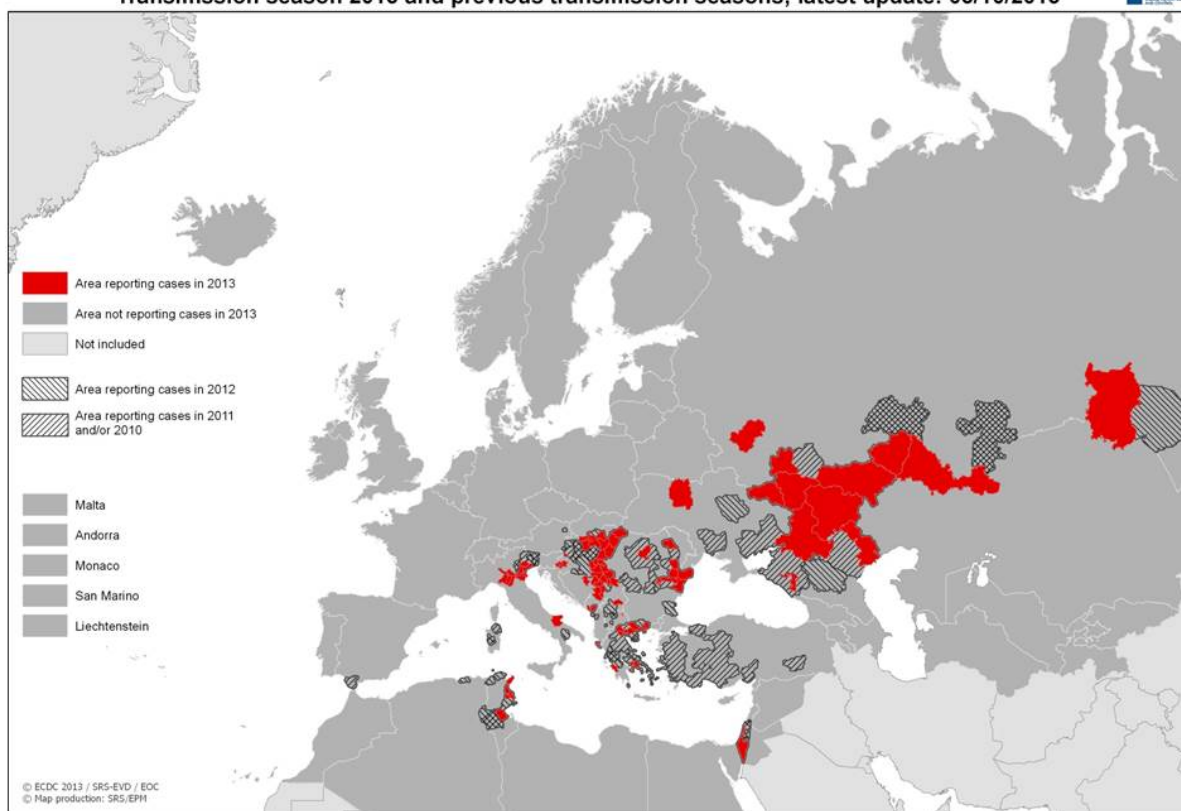
The 2013 season is progressing in comparable fashion to previous years in the EU and neighbouring countries. West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures are considered important for ensuring blood safety by the national health authorities when human 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.

Reported cases of West Nile fever for the EU and neighbouring countries Transmission season 2013 and previous transmission seasons; latest update: 03/10/2013



Pertussis -Multistate (EU) - Monitoring European outbreaks

Opening date: 11 July 2013

Latest update: 3 October 2013

Epidemiological summary

The Czech Republic

The number of cases of whooping cough in the Czech Republic has increased during 2013 according to a recent [media article](#). According to the National Health Institute (EAA) this is the second highest incidence of the disease in the last ten years.

The United Kingdom

[PHE](#) published an update on the pertussis situation in England during November 2012-July 2013, according to which laboratory-confirmed cases of pertussis have been declining since November 2012 apart from a slight increase in July 2013 in line with seasonal trends. Whilst the overall number of cases has fallen, large numbers of cases continue to be confirmed in individuals aged 15 years or older. The greatest impact in the reduction of the number of cases was seen in infants below three months consistent with the effects due to the maternal immunisation programme that started 1 October 2012. Between January and July 2013 there were 86 confirmed cases in infants under one year of age compared to 288 in the first seven months of 2012.

Pertussis immunisation has been offered to all pregnant women to protect infants from birth and this programme will continue in

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2013/2014 until further notice. Information on the uptake of pertussis immunisation in pregnant women has been published for women giving birth up to the end March 2013. New provisional data suggests that coverage has fallen on a monthly basis since that time and was estimated at 49.8% for women giving birth in June 2013.

Web sources:

[ECDC Annual Epidemiological Report2012](#) | [ECDCPertussis](#) | [MedISys](#) | [WHO](#) | [Ireland](#) | [HPS Scot](#) | [PHE](#) | [THL](#) | [BMG](#) | [SMI](#) | [Hungary](#)

ECDC assessment

Over the last 20 years, the epidemiology of pertussis has changed remarkably with a shift from mainly paediatric cases (normally children <10 years of age) towards adolescents, adults and infants too young to have been fully vaccinated. Infants are at highest risk of complications and death from pertussis, and immediate interventions should focus on protecting this group. Pertussis is generally under-reported in adults but this population group is the source of infection to young children.

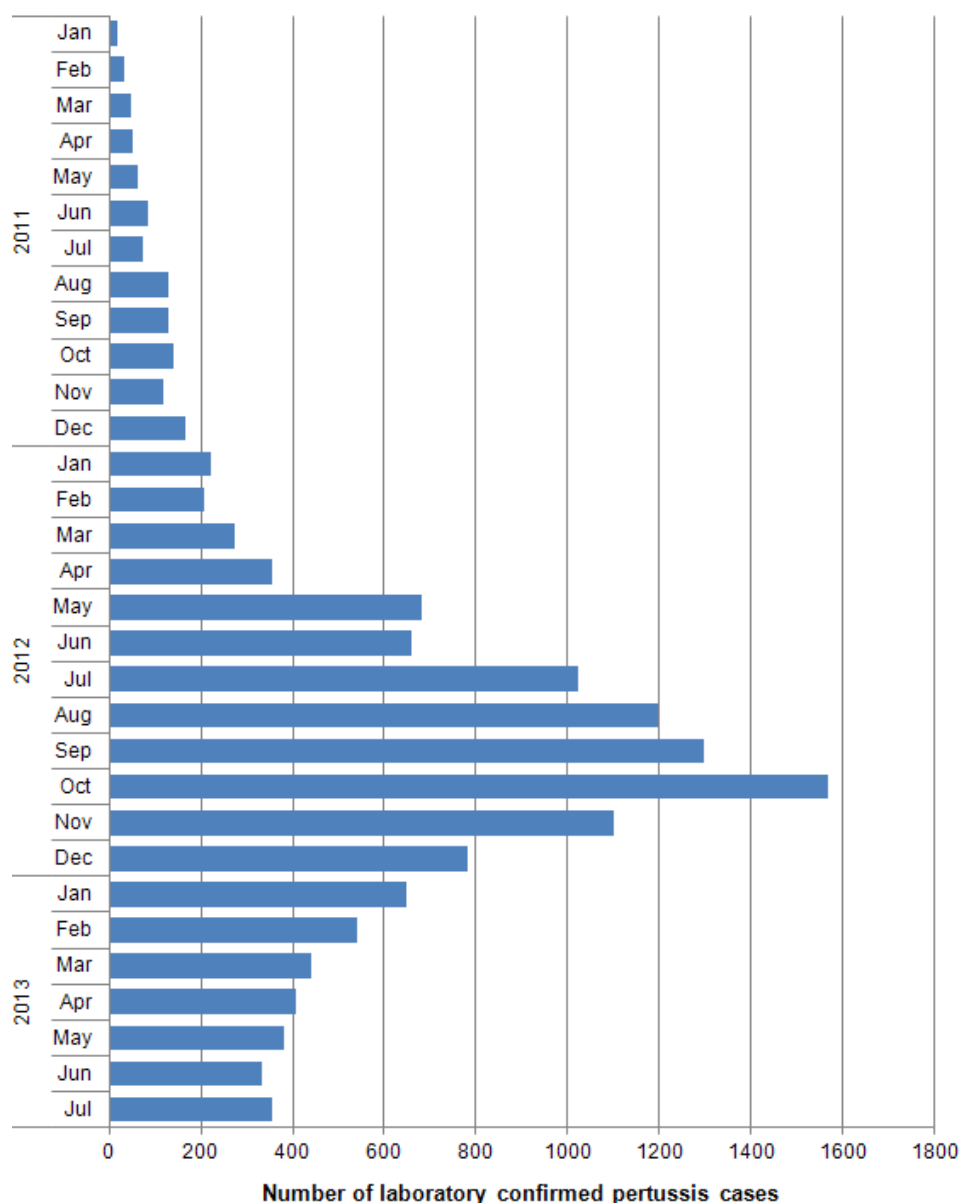
Pertussis P3 serotypes emerged globally after 1988, and now predominate in many EU/EEA countries. They produce more pertussis toxin which appear to suppress immunity and reduce the duration of immunity among vaccinated or naturally infected individuals. There is evidence that duration of immunity induced by the current DTaP vaccine may be shorter than that induced by the previous DTwP vaccine. Case-based pertussis data is reported to the European Surveillance System annually.

Actions

ECDC monitors pertussis transmission in Europe on a monthly basis through its epidemic intelligence activities.

Provisional number of confirmed cases of pertussis in England, by month, January 2011 to July 2013

PHE



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 3 October 2013

Epidemiological summary

Worldwide, as of 2 October 2013, 287 cases of poliomyelitis have been notified to WHO compared with 154 for the same period in 2012, which represents an increase of 86%. Seven countries have recorded cases in 2013: Afghanistan (6), Pakistan (36), Nigeria (49), Somalia (175), Kenya (14) Ethiopia (4) and South Sudan (3).

Seventeen cases of WPV1 were reported in the past week: one case in Ethiopia, one case in Somalia, two cases in Nigeria, two cases in Afghanistan, eight cases in Pakistan and three cases in South Sudan.

South Sudan has not seen indigenous wild poliovirus since 2004, and had interrupted re-established transmission of wild poliovirus in June 2009. All the currently reported three cases had previously been immunised with oral polio vaccine (OPV). Genetic sequencing is underway to determine the origin of the isolated viruses and possible relation to the ongoing Horn of Africa outbreak. The cases are from North Bahr El Gazal state (close to the border to Sudan) and Eastern Equatoria state (close to the

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border with Kenya and Uganda). The cases have triggered a full outbreak response from the Global Polio Eradication Initiative (GPEI) operational perspective.

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 when three young Bulgarian children of Roma ethnicity developed flaccid paralysis caused by WPV. Investigations showed that the virus 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.

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, indicating widespread transmission throughout the country. Detection of WPV in environmental samples is a signal of WPV transmission and consequently of concern and highlights the potential for re-establishing transmission in Europe. To interrupt WPV1 transmission, a supplementary immunisation activity (SIA) has been ongoing since August in Israel. Supplementary immunisation activity for the West Bank and Gaza have been tentatively scheduled for October and November.

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.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 3 October 2013

Epidemiological summary

Americas

In the United States, 20 cases of dengue fever have been reported in Florida. Paraguay's health authorities recorded 448 new cases of dengue fever in September, 83% in the capital city Asuncion. In Guatemala, 6 896 cases have been reported including 12 deaths since the beginning of the year. In Honduras, 25 348 cases were notified in 2013, compared with 15 564 cases in 2012.

The Caribbean

In Barbados, 511 cases have been confirmed so far this year, compared with 169 cases for the same period last year. In Martinique dengue circulation has been observed during the past weeks. The predominant circulating serotype is DENV-2. In Guadeloupe the number of new cases has been stable over the past weeks. The predominant circulating serotype is DENV-4, which has not circulated on the island for many years.

Asia

India is experiencing a recent spike in dengue activity, particularly in the capital city. According to media reports, more than 1 300 cases of dengue have been reported in Delhi since the end of August, with 443 new cases in the past week. This is an increase compared to the same period in 2012 when 55 cases were reported. Five people have died but only two have been officially confirmed. The real number of patients suffering from dengue might be much higher, as some hospitals do not notify cases. According to media reports, 55 to 70 patients have been admitted to hospital in the last month with symptoms of dengue fever in the district of Parsa in Nepal.

Australia, Lao PDR, Malaysia and Singapore have reported more cases in 2013 than 2012 for the same time period.

The Pacific

The recent trend is declining in New Caledonia. French Polynesia, however, continues to report [dengue activity](#).

Websources: [ECDC Dengue](#) | [Healthmap Dengue](#) | [MedISys](#) | [ProMED Asia update](#) | [ProMED Americas update](#) | [WPRO update](#) | [CDC Dengue](#)

ECDC assessment

South-East Asia, Central America and the Caribbean appear to be experiencing a severe season this year.

ECDC monitors individual outbreaks, seasonal transmission patterns and inter-annual epidemic cycles of dengue through epidemic intelligence activities in order to identify significant changes in disease epidemiology. Of particular concern is the potential for the establishment of dengue transmission in Europe. Before the 2012 outbreak in the Autonomous Region of Madeira, local transmission of dengue was reported for the first time in France and Croatia in 2010. Imported cases are being detected in European countries, highlighting the risk of locally acquired cases occurring in countries where the competent vectors are present.

Actions

ECDC has published a technical [report](#) on the climatic suitability for dengue transmission in continental Europe and [guidance for invasive mosquitoes' surveillance](#).

From week 28 onwards, ECDC has been monitoring dengue on a biweekly basis.

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

Opening date: 24 September 2012

Latest update: 3 October 2013

Epidemiological summary

As of 3 October 2013, there have been 139 laboratory-confirmed cases of MERS-CoV worldwide, including 60 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 117 symptomatic or asymptomatic cases including 49 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), Italy (1), France (2), Germany (2) and Tunisia (3). 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.

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](#) was held by teleconference on, 25 September 2013. The Committee concluded that it saw no reason to change its advice to the Director-General. Based on the current information, and using a risk-assessment approach, it was the unanimous decision of the Committee 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](#).

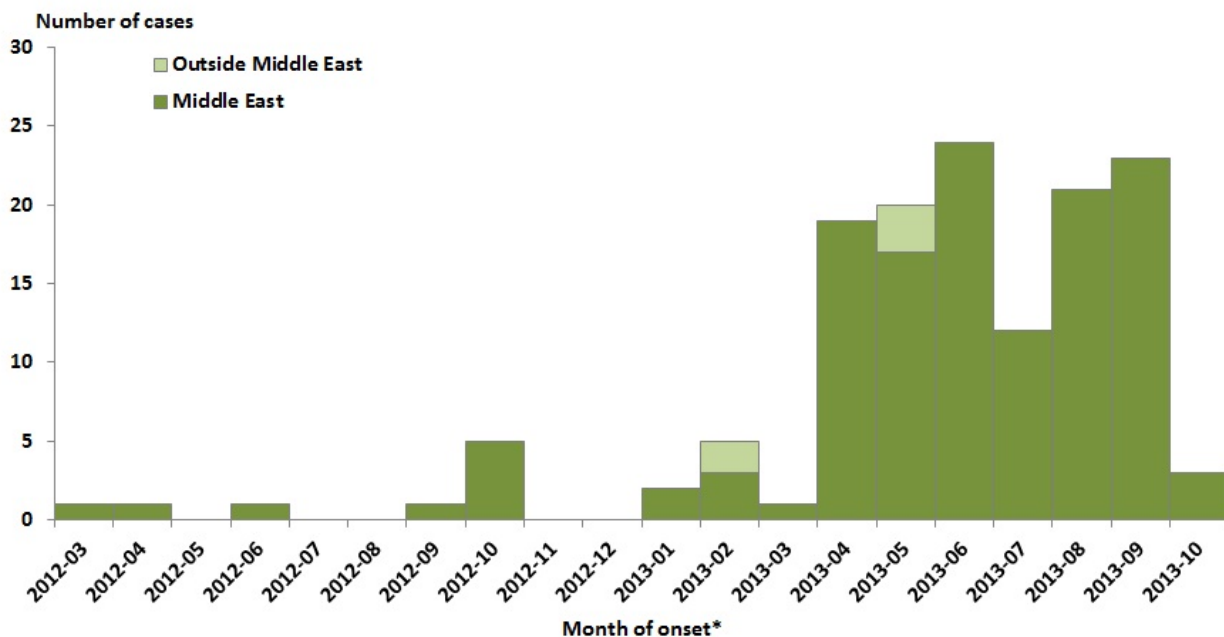
ECDC published a [Public Health Development](#) on 27 August 2013 regarding the isolation of MERS-CoV from a bat sample.

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.

Distribution of confirmed cases of MERS-CoV by month* and place of probable infection, March 2012 - 03 October 2013 (N=139)

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 - 03 October 2013 (n=128*)

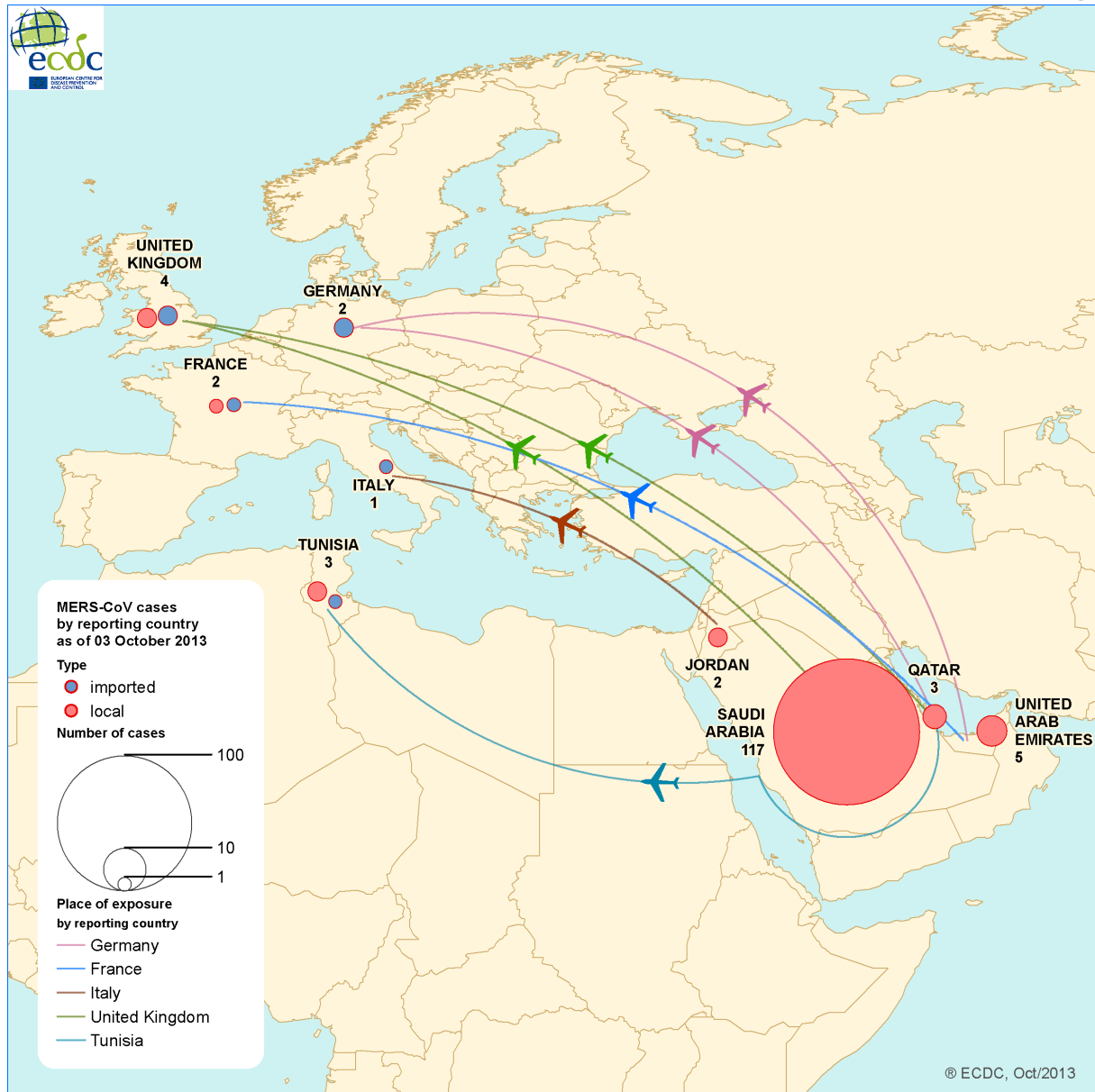
ECDC SRS



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

Distribution of MERS-CoV cases by place of reporting as of 03 October 2013

ECDC SRS



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