COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 43, 18-24 October 2015

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Influenza - Multistate (Europe) - Monitoring 2015-2016 season

Opening date: 2 October 2015 Latest update: 22 October 2015

Following the 2009 pandemic, influenza transmission in Europe has returned to its seasonal epidemic pattern, with peak activity during winter months. ECDC monitors influenza activity in Europe during the winter season and publishes its report weekly on the Flu News Europe website. The reporting for the season 2015-2016 has started. As is usual for this time of year, intensity of influenza activity in the European Region continued to be low in week 42.

➔Update of the week

In week 42, epidemiological data were reported by 32 countries, with all reporting low influenza activity.

West Nile virus - Multistate (Europe) - Monitoring season 2015

Opening date: 2 June 2015 Latest update: 22 October 2015

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. During the June-to-November transmission season, ECDC monitors the situation in EU Member States and neighbouring countries in order to inform blood safety authorities of WNF-affected areas and identify significant changes in the epidemiology of the disease. The 2015 transmission season started later than in previous years and it is still active, but at a lower level than last year. In week 41, France reported its first human case of West Nile virus infection since 2003.

➔Update of the week

During the past week, no new cases were reported by EU Member States. In neighbouring countries, Russia reported four new cases in the already affected Saratovskaya Oblast.

As of 22 October 2015, 104 cases of West Nile fever in humans have been reported in EU Member States and 134 cases in neighbouring countries since the beginning of the 2015 transmission season.

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Non EU Threats

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

Opening date: 24 September 2012 Latest update: 22 October 2015

Since April 2012 and as of 22 October 2015, 1 626 cases of MERS, including 624 deaths, have been reported by local health authorities worldwide. The source of the virus remains unknown, but the pattern of transmission and virological studies point towards dromedary camels in the Middle East being a reservoir from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission is amplified among household contacts and in healthcare settings, as was clearly shown in the recent outbreak in South Korea.

➔Update of the week

Since 15 October 2015, there have been ten new cases reported from Saudi Arabia.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 22 October 2015

An epidemic of Ebola virus disease (EVD) has been ongoing in West Africa since December 2013, mainly affecting Guinea, Liberia and Sierra Leone. On 8 August 2014, WHO declared the Ebola epidemic in West Africa a Public Health Emergency of International Concern (PHEIC). As of 20 October 2015, WHO has reported 28 504 cases of Ebola virus disease related to the outbreak in West Africa, including 11 298 deaths. The number of cases in the most affected countries peaked in autumn 2014 and has been slowly decreasing since. Liberia was declared Ebola-free by WHO on 3 September 2015. Since the end of July 2015, in Guinea and Sierra Leone, the last two affected countries, case incidence has remained below 10 cases per week and EVD transmission has been geographically confined to small areas in both countries. The risk of spread, regionally and globally, remains until all the countries in West Africa are declared Ebola-free.

➔Update of the week

According to WHO, three confirmed cases were reported from Guinea in the week leading up to 18 October. The last case from Guinea prior to these new confirmed cases was reported on 27 September. No new cases have been reported for five consecutive weeks in Sierra Leone.

In the UK, the Ebola survivor who was diagnosed with EVD on 29 December 2014 and admitted to the Royal Free Hospital with unusual late complications on 9 October, has been diagnosed with viral meningitis caused by the original Ebola infection according to a statement from the hospital on 21 October. She has now shown significant improvement and has consented to receive the experimental drug GS-5734.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 22 October 2015

Dengue fever is one of the most prevalent vector-borne diseases in the world. It affects an estimated 50 to 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 dengue outbreak in the autonomous province of Madeira, Portugal, in October 2012, and the autochthonous dengue cases in the south of France in 2014 and 2015, further underline the importance of surveillance and vector control in other European countries.

➔Update of the week

There are several ongoing outbreaks of dengue fever across the globe.

Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013 Latest update: 22 October 2015

An outbreak of chikungunya virus infection started in the Caribbean in December 2013 later spreading to the Americas and Pacific region. In 2015, there remained ongoing outbreaks in these regions but at a lower level compared with the same period last year, especially in the Pacific region. So far this year, no autochthonous cases of chikungunya virus infection have been detected in Europe .

➔Update of the week

Ongoing outbreaks are reported in the Caribbean, Americas, and the Pacific.

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Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 9 July 2015

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, as of 15 October 2015, 679 cases have been reported, including 275 deaths. No autochthonous cases have been reported outside of China. Most cases have been unlinked, and sporadic zoonotic transmission from poultry to humans is the most likely explanation for the outbreak.

➔Update of the week

Since WHO's last update on 4 September 2015, two new cases of avian influenza A(H7N9) were notified in China.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 15 October 2015

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission of the virus has completely stopped and the world becomes polio-free. Polio was declared a Public Health Emergency of International Concern (PHEIC) on 5 May 2014 due to concerns regarding the increased circulation and international spread of wild poliovirus during 2014. On 17 August 2015, the Temporary Recommendations in relation to PHEIC were extended for another three months. WHO recently declared wild poliovirus type 2 eradicated worldwide. As of 22 October 2015, WHO has reported 51 cases of wild poliovirus compared with 246 during the same time period last year. All cases so far in 2015 have been reported from Afghanistan and Pakistan.

➔Update of the week

During the past week, WHO reported no new wild poliovirus cases and no new circulating vaccine-derived poliovirus (cVDPV) cases.

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II. Detailed reports

Influenza - Multistate (Europe) - Monitoring 2015-2016 season

Opening date: 2 October 2015 Latest update: 22 October 2015

Epidemiological summary

Influenza activity in the WHO European Region remained at low levels in all 32 countries which reported data for week 42/2015. In line with the low influenza activity across the Region, sporadic influenza detections were reported: three from sentinel sources, 17 from non-sentinel sources and three from laboratory-confirmed hospitalised influenza cases.
Both seasonal influenza A subtypes (A(H1N1)pdm09 and A(H3N2)) and influenza B were detected.

ECDC assessment

As is usual for this time of year, intensity of influenza activity in the European Region continues to be low.

Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its report weekly on the Flu News Europe website.

West Nile virus - Multistate (Europe) - Monitoring season 2015

Opening date: 2 June 2015 Latest update: 22 October 2015

Epidemiological summary

As of 22 October 2015, 104 cases of West Nile fever in humans have been reported in EU Member States and 134 cases in neighbouring countries since the beginning of the 2015 transmission season.

Web sources: ECDC West Nile fever | ECDC West Nile fever risk assessment tool | ECDC West Nile fever maps | WHO fact sheet

ECDC assessment

WNF in humans is a notifiable disease in the EU. The implementation of control measures is considered important by the national health authorities for ensuring blood safety when human cases of WNF fever occur. According to the EU Blood Directive, efforts should be made to defer blood donations from affected areas with ongoing virus transmission, unless donations are tested using individual nucleic acid amplification testing (NAAT).

Actions

ECDC produces weekly WNF maps during the transmission season (June to November) to inform blood safety authorities of WNF-affected areas.

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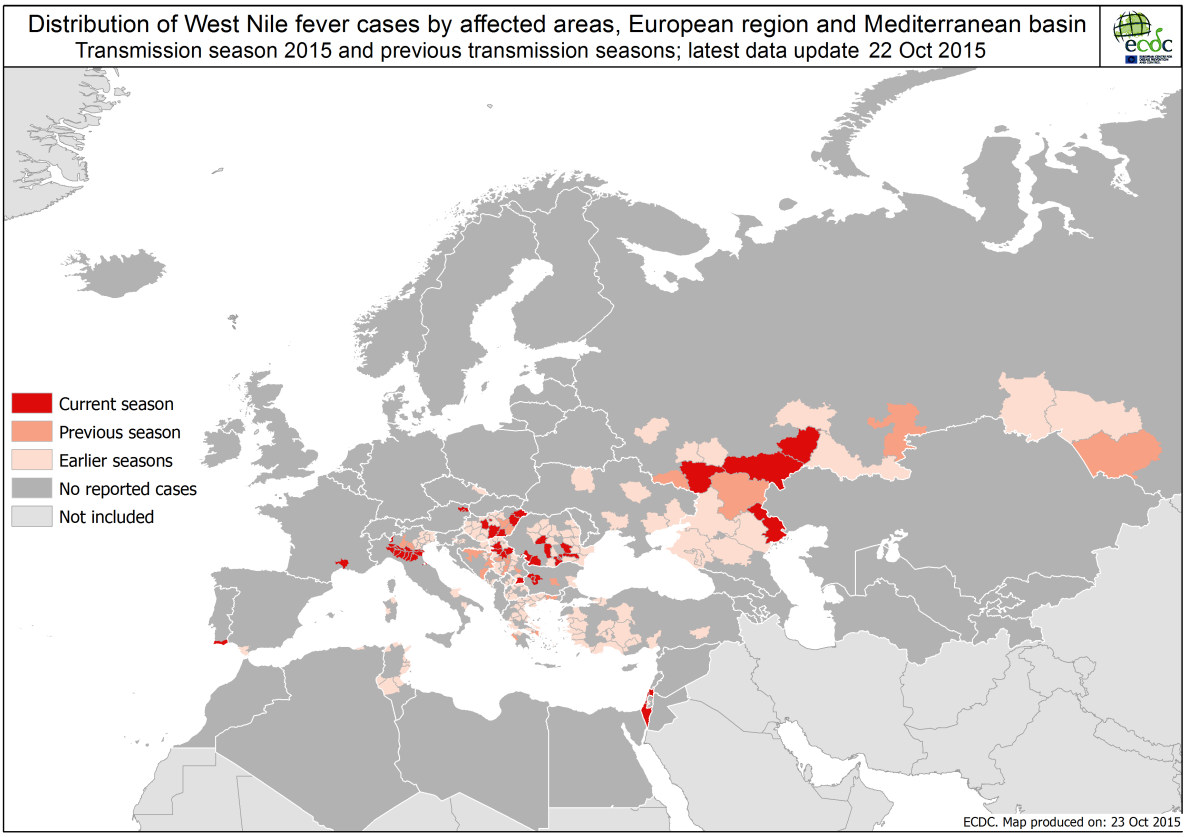
Source: ECDC



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

Opening date: 24 September 2012 Latest update: 22 October 2015

Epidemiological summary

As of 22 October, 1 626 cases of MERS, including 624 deaths, have been reported by local health authorities worldwide.

Saudi Arabia
The ten newly reported cases this week were reported from Riyadh (6), Hofuf (3) and Dawadami (1). Four of the cases were male and six female. One of the cases was a healthcare worker. One case was due to nosocomial transmission. Four cases were female household contacts in Riyadh. Four cases were classified as primary cases.

Web sources: ECDC's latest rapid risk assessment | ECDC novel coronavirus webpage | WHO | WHO MERS updates | WHO travel health update | WHO Euro MERS updates | CDC MERS | Saudi Arabia MoH | Saudi Arabia statement |ECDC factsheet for professionals

ECDC assessment

The MERS outbreak in the Middle East poses a low risk to the EU. Efforts to contain the nosocomial clusters in the affected countries are vital to prevent wider transmission. Although sustained human-to-human community transmission is unlikely,

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secondary transmission to unprotected close contacts, especially in healthcare settings, remains possible, as documented in recent outbreaks in South Korea, Saudi Arabia and Jordan.

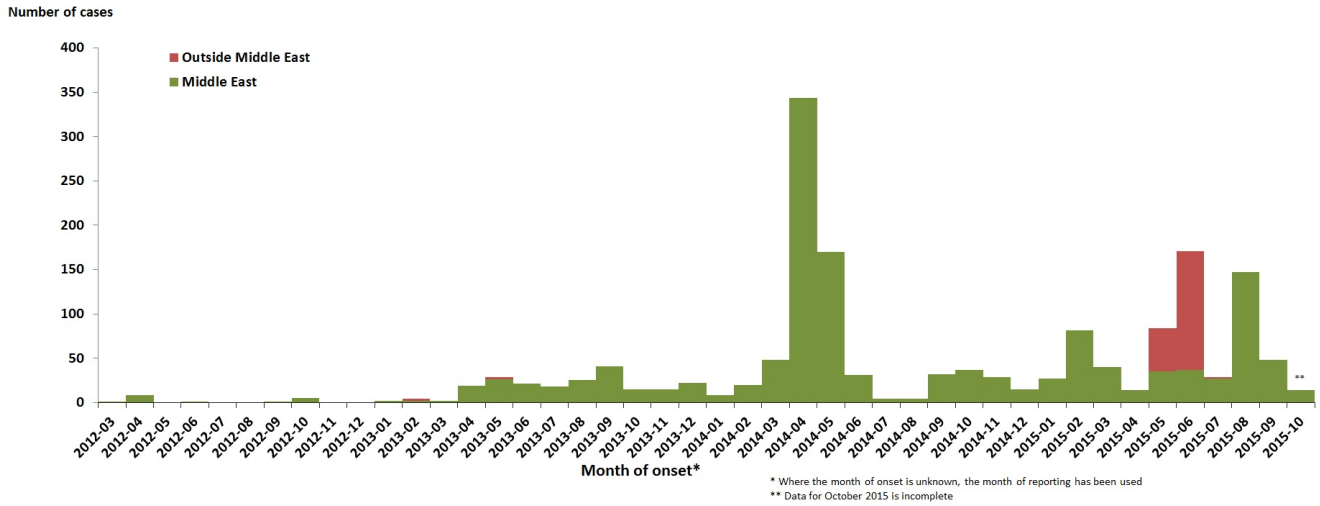
Countries should advise travellers returning from countries affected by MERS to seek medical attention if they develop a respiratory illness with fever and cough during the two weeks after their return and to disclose their recent travel history to the healthcare provider. Travellers, especially those with pre-existing medical conditions, should be reminded of the importance of good hand and food hygiene, and to avoid contact with sick people. Travellers to the Arabian Peninsula should avoid close contact with camels, visiting farms and consuming unpasteurised camel milk, urine or improperly cooked meat.

Actions

ECDC published a rapid risk assessment on 21 October 2015.

Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 22 October 2015 (n=1 626)

Source: ECDC



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MERS-CoV by country of reporting, March 2012 – 22 October 2015 (n=1 626)

Source: ECDC

Region	Country	Number of cases	Number of deaths
Middle East	Saudi Arabia	1265	539
	United Arab Emirates	81	11
	Qatar	13	5
	Jordan	35	14
	Oman	6	3
	Kuwait	4	2
	Egypt	1	0
	Yemen	1	1
	Lebanon	1	0
	Iran	6	2
Europe	Turkey	1	1
	UK	4	3
	Germany	3	2
	France	2	1
	Italy	1	0
	Greece	1	1
	Netherlands	2	0
	Austria	1	0
Africa	Tunisia	3	1
	Algeria	2	1
Asia	Malaysia	1	1
	Philippines	3	0
	South Korea	185	36
	China	1	0
	Thailand	1	0
Americas	United States of America	2	0
	Global	**1626**	**624**

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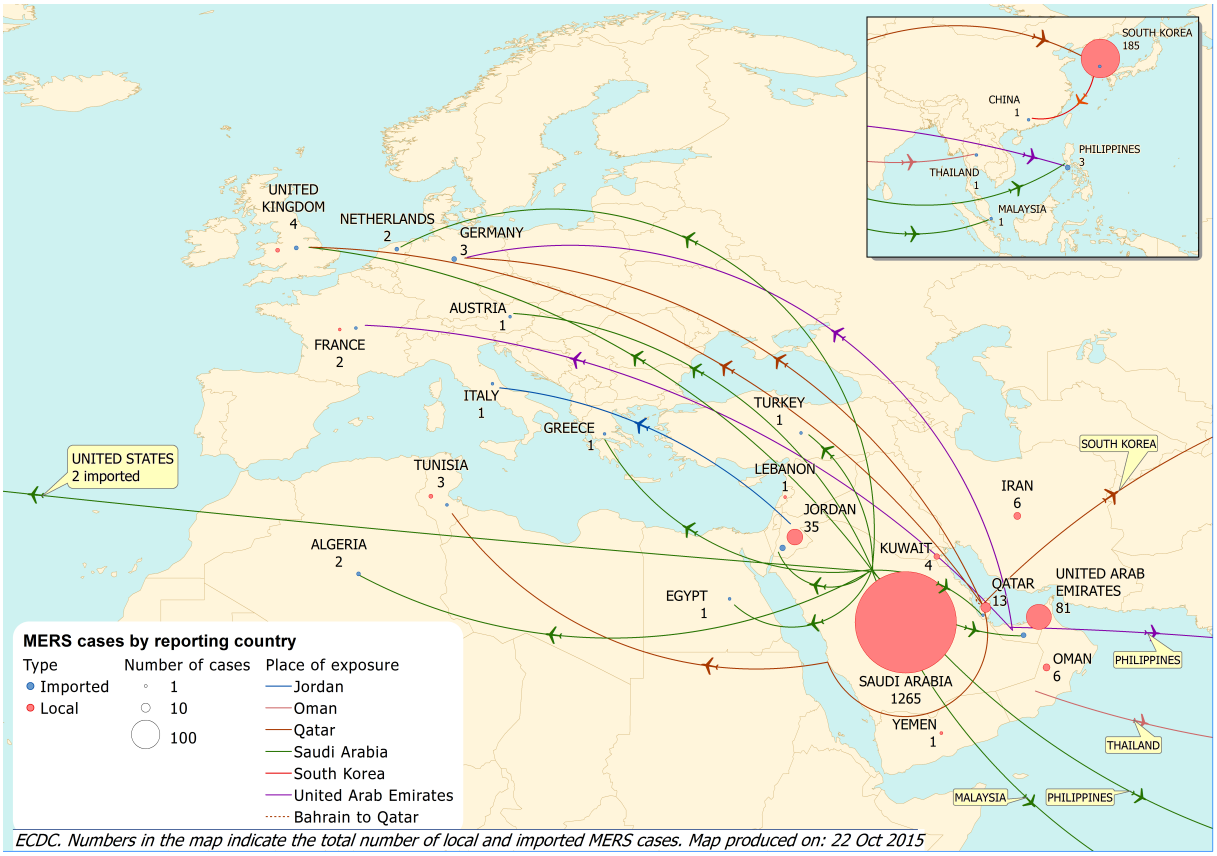
Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 22 October 2015 (n=1 626)

Source: ECDC



ECDC. Numbers in the map indicate the total number of local and imported MERS cases. Map produced on: 22 Oct 2015

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 22 October 2015

Epidemiological summary

Distribution of cases as of 20 October 2015:

Countries with intense transmission:

- **Guinea:** 3 801 cases, of which 3 347 were confirmed; 2 535 deaths.
- **Sierra Leone:** 14 031 cases, of which 8 704 were confirmed; 3 955 deaths.

Countries with previously widespread and intense transmission:

- **Liberia**: declared Ebola-free on 3 September 2015.

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Countries that have reported an initial case or localised transmission:

- Nigeria, Senegal, the USA, Spain, Mali, the UK and Italy.

Situation in West African countries

Guinea

According to WHO, three confirmed cases were reported from Guinea in the week leading up to 18 October. Of the three confirmed cases, one was from Conakry and two were from Forecariah. The case from Conakry, a 21-year-old male, was reported from the Ratoma area but is not a known contact of a previous case. Genomic analyses suggest that he was not infected with the strain responsible for the most recent cases in Conakry and Forecariah. One of the cases identified from Forecariah, a 35-year-old woman, was a registered contact identified post-mortem and genomic analyses suggest that she is part of the Ratoma chain of transmission. The second case identified from Forecariah was her three-month-old child. Two hundred and forty six contacts remained under follow-up in the week leading up to 18 October, of which 43 were located in Conakry with the remainder located in the prefecture of Forecariah. In addition, 253 contacts have been identified but have so far proven untraceable in the past 42 days. The ring vaccination trial is continuing in Guinea. All rings comprised contacts, and contacts of contacts associated with confirmed cases, and are receiving immediate vaccination with the rVSV-ZEBOV Ebola vaccine.

Sierra Leone

No new confirmed cases were reported for the fifth consecutive week. The last case to receive treatment was discharged from an Ebola treatment centre in Kambia on 26 September. All identified contacts have now completed a 21-day follow-up. However, two high-risk contacts, one from Bombali and one from Kambia, remain untraced. The ring vaccination Phase 3 efficacy trial of the rVSV-ZEBOV vaccine was extended from Guinea to Sierra Leone in September.

Situation among healthcare workers

No new health worker infections were reported by WHO in the week up to 18 October.

Outside of the three most affected countries, 2 Ebola-infected healthcare workers were reported in Mali, 11 in Nigeria, 1 in Spain (infected while caring for an evacuated EVD patient), 3 in the UK (all infected in Sierra Leone), 9 in the USA and 1 in Italy (infected in Sierra Leone).

Images

- Epicurve 1: the epicurve shows the confirmed cases in the three most affected countries. In order to better represent the tail of the epidemic, only the data for 2015 are shown.
- Epicurve 2: the epicurve shows the confirmed cases in Guinea and Sierra Leone. In order to better represent the tail of the epidemic, only the data for 2015 are shown.

Web sources: ECDC Ebola page | ECDC Ebola and Marburg fact sheet | WHO situation summary | WHO Roadmap | WHO Ebola Factsheet | CDC | Ebola response phase 3: Framework for achieving and sustaining a resilient zero | ReEBOV Antigen Rapid Test Kit | Institut Pasteur will open a lab in Conakry | Emergency Operation Centres in the three affected countries | Entry screening in US

ECDC assessment

This is the largest-ever documented epidemic of EVD, both in terms of numbers and geographical spread. The epidemic of EVD increases the likelihood that EU residents and travellers to the EVD-affected countries will be exposed to infected or ill persons. The risk of infection for residents and visitors in the affected countries through exposure in the community is considered low if they adhere to the recommended precautions. Residents and visitors to the affected areas run a risk of exposure to EVD in healthcare facilities.

The risk of importing EVD into the EU and the risk of transmission within the EU following an importation, remains low or very low as a result of the range of risk reduction measures that have been put in place by the Member States and by the affected countries in West Africa. However, continued vigilance is essential. If a symptomatic case of EVD presents in an EU Member State, secondary transmission to caregivers in the family and in healthcare facilities cannot be excluded.

The number of confirmed cases has remained low since the end of July. The introduction of an EVD case into unaffected countries remains possible as long as cases exist in any country. With adequate preparation, however, such an introduction can be contained through a timely and effective response. Following the recent report about the previously positive EVD UK nurse, unusual late complications should also be taken into account.

Actions

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As of 22 October 2015, ECDC has deployed 95 experts (on a rotating basis) from within and outside the EU in response to the Ebola outbreak. This includes an ECDC-mobilised contingent of experts to Guinea. ECDC is reporting this threat on a weekly basis in the CDTR.

The latest (13th) update of the rapid risk assessment was published on 16 October 2015.
On 16 October 2015, ECDC published Recent development on sexual transmission of Ebola virus.
On 31 July 2015, ECDC published Positive preliminary results of an Ebola vaccine efficacy trial in Guinea.
On 22 January 2015, ECDC published Infection prevention and control measures for Ebola virus disease. Management of healthcare workers returning from Ebola-affected areas.
On 4 December 2014, EFSA and ECDC published a Scientific report assessing Risk related to household pets in contact with Ebola cases in humans.
On 29 October 2014, ECDC published a training tool on the safe use of PPE and options for preparing for gatherings in the EU.
On 23 October 2014, ECDC published Public health management of persons having had contact with Ebola virus disease cases in the EU.
On 22 October 2014, ECDC published Assessing and planning medical evacuation flights to Europe for patients with Ebola virus disease and people exposed to Ebola virus.
On 13 October 2014, ECDC published Infection prevention and control measures for Ebola virus disease: Entry and exit screening measures.
On 6 October 2014, ECDC published risk of transmission of Ebola virus via donated blood and other substances of human origin in the EU.
On 22 September 2014, ECDC published assessment and planning for medical evacuation by air to the EU of patients with Ebola virus disease and people exposed to Ebola virus.
On 10 September 2014, ECDC published an EU case definition.

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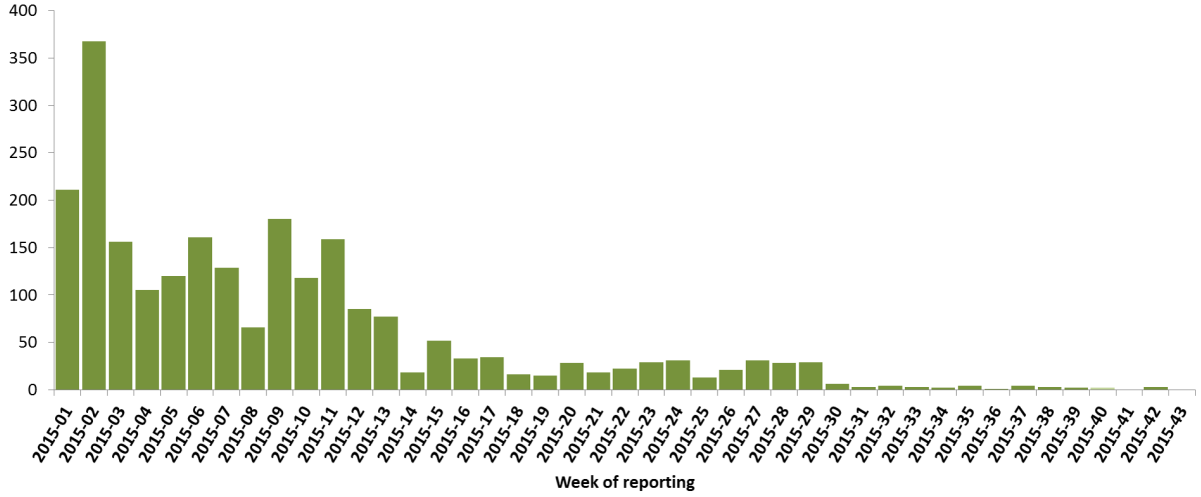
Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 01/2015 to 43/2015)

Adapted from WHO figures; *data for week 43/2015 are incomplete



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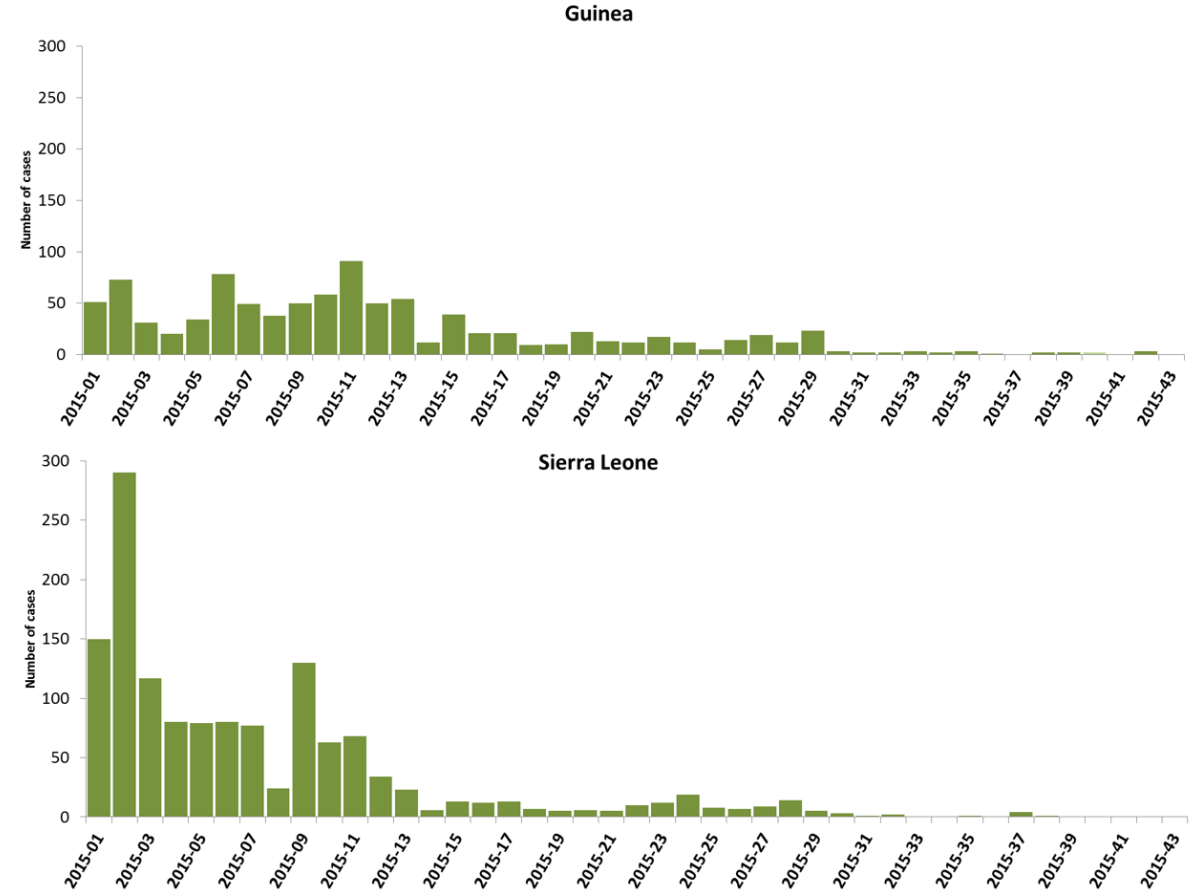
Distribution of confirmed cases of EVD by week of reporting in Guinea and Sierra Leone (weeks 01/2015 to 43/2015)

Adapted from WHO figures; *data for week 43/2015 are incomplete



Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 22 October 2015

Epidemiological summary

Europe
No new autochthonous cases reported since the last monthly update.

Asia
In **India**, the number of dengue cases in Delhi continues to rise with more than 10 000 cases and 41 deaths recorded since the start of the year, according to media quoting local health authorities. **Pakistan** is experiencing a surge in dengue cases with more than 5 200 cases and six deaths reported nationally. According to data from the National Institute of Health, the majority of cases have been reported in Karachi (2 203) and Rawalpindi (1 707).

Recently published figures from the Ministries of Health in **Thailand**, **Malaysia** and the **Philippines** indicate that dengue activity continues to grow steadily. All three countries have recorded more than 90 000 dengue fever cases each so far in 2015. **Vietnam**

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has reported 46 989 cases so far in 2015, an increase of 15 141 cases compared with the same time period last year, according to media quoting the Ministry of Health.

In **Taiwan**, as of 16 October, dengue cases have risen to nearly 25 000 cases with around 20 000 of these cases reported in Tainan city. The recent number of weekly cases has been decreasing in Tainan city, indicating that dengue activity has been slowing down. However, the number of new weekly cases has been gradually increasing in Kaohsiung City, according to Taiwan CDC.

Caribbean
In **Puerto Rico**, the weekly number of suspected cases reported in weeks 35 and 36 remained below the epidemic threshold. As of 30 September, 1 237 suspected cases and 30 confirmed cases have been reported so far in 2015. DENV-2 has been the predominant serotype in the last eight weeks, according to the US CDC.

As of 16 October 2015, all epidemiological indicators for dengue have remained low in **Guadeloupe**, **Martinique** and **Saint Barthélemy** over the past month and no new dengue outbreak has been identified. In **Saint Martin**, the sporadic circulation of dengue virus continues, but the weekly number of suspected cases is currently at its lowest level in the past four months, according to InVS.

Americas
According to the latest update from the WHO Pan American Health Organization (WHO PAHO) as of 15 October 2015, 2 346 680 probable and confirmed cases of dengue virus infection and 916 deaths, have been reported so far this year in the WHO Region of the Americas.

Pacific islands and Australia
According to the Pacific Public Health Surveillance Network (PACNET), there is an ongoing DENV-1 outbreak in **French Polynesia** with 25 confirmed cases reported for the week ending 4 October 2015. In September, there were 10 hospitalisations, including one severe case. As of 14 October, there is an ongoing DENV-3 outbreak in **American Samoa** with 450 cases reported, of which 143 have been hospitalised. However, the recent number of weekly cases has been decreasing. There remains active circulation of DENV-2 in **Fiji**, DENV-3 in **Solomon Islands** and DENV-1 in **New Caledonia**.

There are currently no ongoing outbreaks in North Queensland in **Australia**, according to Queensland Health.

Africa
No data available.

Publication
A new study published in the *Proceedings of the National Academy of Sciences* (PNAS) shows that epidemics of dengue in South East Asia from 1997 to 1998 were linked to high temperatures brought on by the El Niño weather phenomenon.

Web sources: ECDC Dengue | Healthmap Dengue | MedISys |

ECDC assessment

The autochthonous transmission of dengue fever in the south of France during 2014 and 2015 highlights the risk of locally-acquired cases occurring in countries where competent vectors are present. This underlines the importance of surveillance and vector control in European countries that have competent vectors.

Actions

ECDC has published a technical report on the climatic suitability for dengue transmission in continental Europe and guidance for the surveillance of invasive mosquitoes.

ECDC monitors the dengue situation worldwide on a monthly basis.

Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013 Latest update: 22 October 2015

Epidemiological summary

Europe

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No autochthonous cases of chikungunya virus infection have been reported in EU Member States so far in 2015. According to InVS, 27 imported cases of chikungunya have been reported in **France** in areas where the vector is present.

Americas
Chikungunya cases in the Caribbean and the Americas continued to increase during the past couple of weeks, but at a much lower level compared with the same period last year. According to the latest update from the WHO Pan American Health Organization (WHO PAHO) on 16 October 2015, 6 049 new suspected and confirmed cases have been reported since 2 October. Since the beginning of the year and as of 16 October 2015, PAHO has reported 597 583 suspected and confirmed cases of chikungunya virus infection and 63 deaths in the WHO Region of the Americas. The cumulative number of cases has reached 1 745 227 since the start of the epidemic in December 2013.

The highest number of cases during the past two weeks were reported in **Colombia** and **Mexico** with 4 647 and 890 new cases recorded respectively.

USA
As of 20 October, 533 chikungunya virus disease cases have been reported from 41 US states so far this year, according to the US CDC. All reported cases occurred in travellers returning from affected areas. No locally-transmitted cases have been reported. In addition, 152 chikungunya cases have been reported from US territories. All reported cases were locally-transmitted cases reported from **Puerto Rico** and the **US Virgin Islands**.

Pacific region
There are ongoing outbreaks on **Marshall Islands** and **Tuvalu**, according to the Pacific Public Health Surveillance Network.

Web sources: PAHO update| ECDC Chikungunya | WHO Factsheet | Medisys page |

ECDC assessment

Outbreaks are still ongoing in the Caribbean and Americas. Cases continued to moderately increase in the past two weeks but at a lower level compared with the same period last year. The vector is endemic in these regions, where it also transmits dengue virus. Continued vigilance is needed to detect imported cases of chikungunya in tourists returning to the EU from these regions.

Europe is vulnerable to the autochthonous transmission of chikungunya virus. The risk for onward transmission in Europe is linked to importation of the virus by viraemic patients in areas with competent vectors (*Aedes albopictus* in mainland Europe, primarily around the Mediterranean, and *Aedes aegypti* on Madeira). Autochthonous transmission from an imported viraemic chikungunya case is possible during the summer season in the EU .

Actions

ECDC published an epidemiological update on 16 September regarding the false positive case of chikungunya in Valencia province, Spain. Despite the fact that autochthonous transmission has not been confirmed in Spain, the conclusions of ECDC's rapid risk assessment published on 24 August remain valid.

ECDC monitors the global chikungunya situation on a bi-weekly basis.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 9 July 2015

Epidemiological summary

On 16 October, WHO acknowledged two new laboratory-confirmed cases of human infection with avian influenza A (H7N9) virus. The cases are from two municipalities, Huzhou city and Jinhua city, both in Zhejiang province. One of the cases is a 55-year-old female and the other case a 53-year-old male, with dates of onset on 18 and 21 September 2015 respectively. Both had exposure to poultry and live poultry markets. No epidemiological link between the cases was reported.

As of 15 October 2015, 679 laboratory-confirmed cases of human infection with avian influenza A(H7N9) viruses, including at least 275 deaths, have been reported to WHO.

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Cases in China since March 2013 have the following geographic distribution: Zhejiang (186), Guangdong (181), Jiangsu (78), Fujian (63), Shanghai (48), Hunan (26), Anhui (32), Hong Kong (13), Xinjiang Uygur Zizhiqu (10), Jiangxi (9), Beijing (6), Shandong (6), Guangxi (4), Henan (4), Taiwan (4), Jilin (2), Guizhou (2) and Hebei (2).
Three imported cases have also been reported: one in Malaysia and two in Canada.

Web sources: Chinese CDC | WHO | WHO FAQ page | ECDC | WHO avian influence updates

ECDC assessment

This outbreak is caused by a novel reassortant avian influenza virus capable of causing severe disease in humans. This is a zoonotic outbreak, in which the virus is transmitted sporadically to humans in close contact with the animal reservoir, similar to the influenza A(H5N1) situation.

During 2015, there have been continued avian influenza A(H7N9) virus detections in the animal population in multiple provinces in China, indicating that the virus persists in the poultry population. If the pattern of human cases follows the trends seen in previous years, the number of human cases may rise over the coming months. Further sporadic cases of human infection with avian influenza A(H7N9) virus are therefore expected in affected and possibly neighbouring areas.

Imported cases of influenza A(H7N9) may be detected in Europe. However, the risk of the disease spreading among humans following an importation to Europe is considered to be very low. People in the EU presenting with severe respiratory infection and a history of potential exposure in the outbreak area will require careful investigation in Europe.

Actions

The Chinese health authorities continue to respond to this public health event with enhanced surveillance, epidemiological and laboratory investigation, including scientific research.

ECDC published an updated Rapid Risk Assessment on 3 February 2015.
ECDC published a guidance document Supporting diagnostic preparedness for detection of avian influenza A(H7N9) viruses in Europe for laboratories on 24 April 2013.

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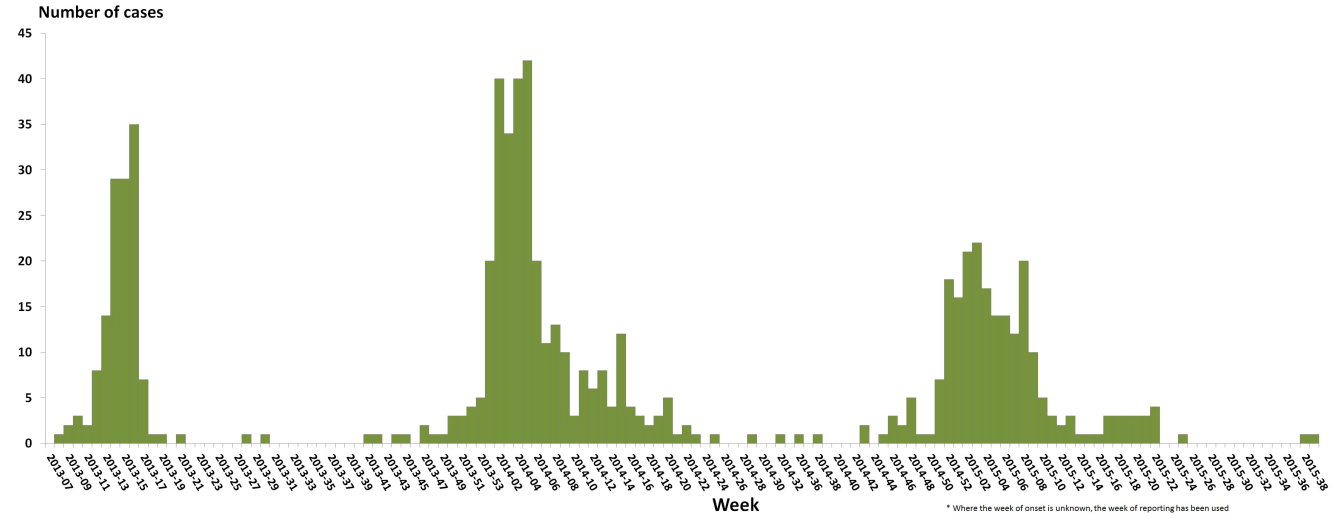
Distribution of avian influenza A(H7N9) cases by first available week as of 22 October 2015 (n=679)

Source: WHO



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 15 October 2015

Epidemiological summary

Worldwide in 2015 so far, 51 wild poliovirus type 1 (WPV1) cases have been reported to WHO, compared with 246 for the same period in 2014. Since the beginning of the year, two countries have reported cases: Pakistan (38 cases) and Afghanistan (13 cases).

In 2015 so far, 14 cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO, compared with 37 for the same period in 2014 from Madagascar (9), Nigeria (1), Ukraine (2), Mali (1) and Laos (1).

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet | Temporary Recommendations to Reduce International Spread of Poliovirus | WHO Statement on the Sixth Meeting of the International Health Regulations Emergency Committee on Polio

ECDC assessment

The last locally acquired wild-polio cases within the current EU borders were reported from Bulgaria in 2001. The most recent wild-polio outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

The confirmed circulation of wild poliovirus in several countries and the documented exportation of wild poliovirus to other countries support the fact that there is a potential risk of wild poliovirus being re-introduced to the EU/EEA. The highest risk of large poliomyelitis outbreaks occurs in areas with clusters of unvaccinated populations and in people living in poor sanitary conditions, or a combination of the two.

References: ECDC latest RRA | Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA | Wild-type poliovirus 1 transmission in Israel - what is the risk to the EU/EEA? |RRA Outbreak of circulating vaccine-derived poliovirus type 1 (cVDPV1) in Ukraine

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Actions

ECDC monitors reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identify events that increase the risk of wild poliovirus being re-introduced into the EU. Following the declaration of polio as a PHEIC, ECDC updated its risk assessment. ECDC has also prepared a background document with travel recommendations for the EU.

Following the detection of the cases in Ukraine of circulating vaccine-derived poliovirus type 1, ECDC published a rapid risk assessment on its website.

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

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