COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 37, 6-12 September 2015

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

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

Opening date: 2 June 2015 Latest update: 11 September 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.

➔Update of the week

During the past week, Austria reported a new case in the newly affected Wiener Umland/Nordteil district. Hungary reported two new cases from newly affected areas, Budapest and Hajdu-Bihar county.
Italy reported six new cases, four from the already affected Modena province and two from the newly affected Piacenza and Bologna provinces.
Romania reported two new cases, one from Bucuresti, an already affected area, and one from the newly affected Ialomita county.

In neighbouring countries, Israel reported 15 new cases, 13 from already affected districts (Central 6; Northern 1, Tel Aviv 6) and two from the newly affected Southern district. Serbia reported a new case in the already affected Juzno-Banatski district.

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Non EU Threats

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 3 September 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.

➔Update of the week

Two new wild poliovirus type 1 (WPV1) cases have been reported in the past week to WHO, one case from Afghanistan and one case from Pakistan.

During the past week, WHO reported a case of circulating vaccine-derived poliovirus type 2 (cVDPV2) from Mali in a Guinean child. According to WHO the closest genetic match to this case is from a case from Kankan, Guinea, with onset of paralysis on 30 August 2014. The genetic changes suggest that the cVDPV2 has been circulating for more than 12 months.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 10 September 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).

➔Update of the week

As of 8 September 2015, WHO has reported 28 160 cases of Ebola virus disease related to the outbreak in West Africa, including 11 291 deaths.

According to the latest WHO situation report published on 9 September 2015, two confirmed cases of EVD were reported in the week up to 6 September, one reported from Guinea and one from Sierra Leone.

On 3 September 2015, WHO declared Liberia free of Ebola virus transmission in the human population. Forty-two days have passed since the second negative test on 22 July 2015 of the last laboratory-confirmed case. Liberia now enters a 90-day period of heightened surveillance.

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

Opening date: 24 September 2012 Latest update: 11 September 2015

Since April 2012 and as of 10 September 2015, 1 579 cases of MERS have been reported by local health authorities worldwide, including 601 deaths. 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.

➔Update of the week

Since 3 September 2015, Saudi Arabia has reported 29 additional cases and 9 deaths in previously reported cases. In the last week Jordan has reported one additional case, who died and one death in a previously reported case.

Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013 Latest update: 27 August 2015

An outbreak of chikungunya virus infection has been ongoing in the Caribbean since December 2013 and has spread to North, Central and South America. There is a concurrent epidemic of chikungunya in the Pacific area. In Europe, France reported autochthonous cases of chikungunya virus infection in 2014. This was the first time since 2015 that locally-acquired transmission of chikungunya was detected in France since 2010.

➔Update of the week

No new autochthonous cases were detected in EU Member States.

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II. Detailed reports

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

Opening date: 2 June 2015 Latest update: 11 September 2015

Epidemiological summary

As of 10 September 2015, 52 cases of West Nile fever in humans have been reported in the EU Member States this season: Italy (35), Romania (7), Hungary (4), Portugal (1), and Austria (5). Fifty-two cases have been detected in neighbouring countries: Israel (40), Russia (9), Palestine (1) and Serbia (2) 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

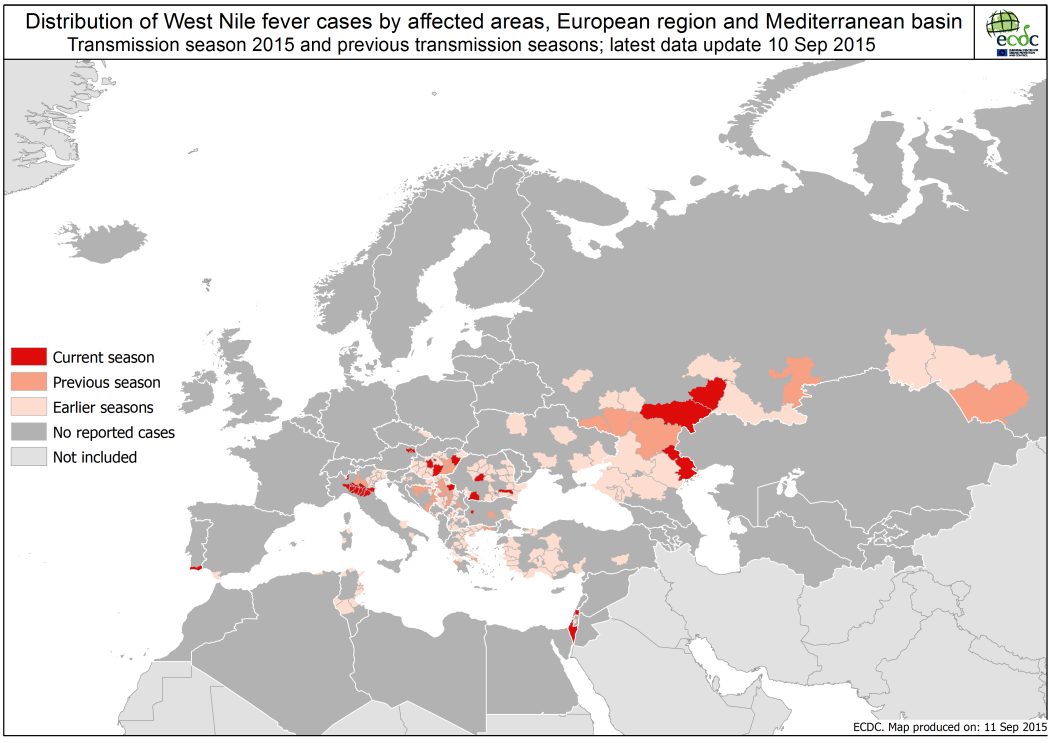
ECDC assessment

WNF in humans is a notifiable disease in the EU. The implementation of control measures is considered important for ensuring blood safety by the national health authorities 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.

Source: ECDC



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 3 September 2015

Epidemiological summary

Worldwide in 2015, 39 wild poliovirus type 1 (WPV1) cases have been reported to WHO so far, compared with 169 for the same

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period in 2014. Since the beginning of the year, two countries have reported cases: Pakistan (30 cases) and Afghanistan (9 cases).

In 2015, 13 cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO so far, compared with 34 for the same period in 2014 from: Madagascar (9), Nigeria (1), Ukraine (2) and Mali (1).

On 17 August, WHO announced that the international spread of polio remains a Public Health Emergency of International Concern (PHEIC) and the Temporary Recommendations (as revised) were extended for three more months.

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 RRA re cVDPV1 in Ukraine

ECDC assessment

Europe is polio-free. 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 both.

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? |

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.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 10 September 2015

Epidemiological summary

Distribution of cases as of 8 September 2015:

Countries with intense transmission:

- **Guinea:** 3 791 cases, of which 3 338 were confirmed; 2 530 deaths.
- **Sierra Leone:** 13 697 cases, of which 8 702 were confirmed; 3 953 deaths.
- **Liberia:** 10 672 cases, of which 3 157 are confirmed as of 20 August. Six confirmed cases including two deaths have been reported since the end of June 2015 when the country was declared Ebola free.

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
In **Guinea**, WHO reported one new confirmed case in Ratoma area (Conakry) in the week up to 6 September, compared with two in the previous week. The case is a 13-years-old girl. She was a registered contact of two previously reported case in the same area.
According to WHO, 292 contacts were under follow-up on 6 September in two prefectures (Conakry and Dubreka).

In **Sierra Leone**, in the past week, WHO reported one new confirmed case, the daughter of a previously reported case (a 60-year-old female who died) in Kambia. The origin of infection remains under investigation for the initial case. As of 6 September,

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around 900 contacts are under surveillance. Among them, 40 are considered as high-risk contacts.

WHO reported that the Phase 3 efficacy trial of the VSV-EBOV vaccine has now been extended from Guinea to Sierra Leone. Contacts, and contacts of contacts associated with the confirmed case in Kambia are being offered the vaccine. Contacts associated with all other chains of transmission in Sierra Leone have now completed follow-up.

Media report three additional cases in Kambia related to the index case. theses cases have not been acknowledged yet by WHO

Liberia has officially been declared free of Ebola virus transmission in the human population by WHO. Forty-two days have passed since the second negative test on 22 July 2015 of the last laboratory-confirmed case. Liberia now enters a 90-day period of heightened surveillance.

Situation among healthcare workers
No new infections among health workers have been reported by WHO in the week up to 6 September. Since the start of the outbreak there have been 881 confirmed health worker infections reported from Guinea, Liberia, and Sierra Leone with 513 deaths.

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), 2 in the UK (both infected in Sierra Leone), 6 in the USA (2 infected in Sierra Leone, 2 in Liberia, and 2 infected while caring for a confirmed case in Texas) and 1 in Italy (infected in Sierra Leone).

Medical evacuations and repatriations from EVD-affected countries
Since the beginning of the epidemic and as of 4 September 2015, 65 individuals were evacuated or repatriated worldwide from the EVD-affected countries. Of these, 38 individuals were evacuated or repatriated to Europe. Thirteen were medical evacuations of confirmed EVD-infected patients to: Germany (3), Spain (2), France (2), UK (2), Norway (1), Italy (1), the Netherlands (1) and Switzerland (1). Twenty-five asymptomatic persons were repatriated to Europe as a result of exposure to Ebola in West Africa: UK (13), Denmark (4), Sweden (3), the Netherlands (2), Germany (1), Spain (1) and Switzerland (1).
Twenty-seven persons were evacuated to the United States.
No new medical evacuations have taken place since 18 March 2015.

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.
- Map: this map is based on country situation reports and shows only confirmed cases of EVD in the past six weeks.

Web sources: ECDC Ebola page | ECDC Ebola and Marburg fact sheet | WHO situation summary | WHO Roadmap | WHO Ebola Factsheet | CDC | WHO declares Liberia Ebola free | Guinea Ring Vaccination trial extended to Sierra Leone to vaccinate contacts of new Ebola case | A suspect case in Serbia tested negative | Media reporting quarantined contacts in Sierra Leone

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.

According to WHO, case incidence has held at three confirmed cases per week for five consecutive weeks. There remains a risk of short-term increases in case incidence as a result of isolated, high-risk cases, and rapid-response teams are on alert to deal with any such cases.

The introduction of an EVD case into unaffected countries remains a risk as long as cases exist in any country. With adequate preparation, however, such an introduction can be contained through a timely and effective response.

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Actions

As of 4 September 2015, ECDC has deployed 93 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. Furthermore, additional experts are already confirmed for deployment to Guinea over the next few months.

ECDC is looking for additional French-speaking experts with field epidemiology experience from EU Member States to join the ECDC-coordinated contingent in response to the Ebola outbreak in Guinea. For further information, please contact Valeria Pelosi at valeria.pelosi@ecdc.europa.eu with copy to support@ecdc.europa.eu.

An epidemiological update is published weekly on the EVD ECDC page.

The latest (12th) update of the rapid risk assessment was published on 1 July 2015.
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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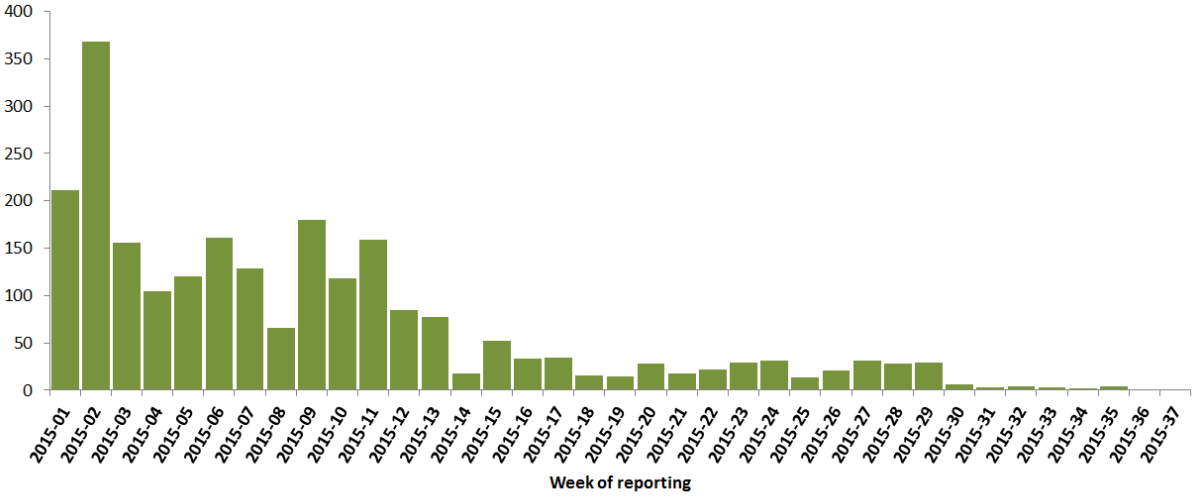
Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 01/2015 to 37/2015)

Adapted from WHO figures; *data for week 37/2015 are incomplete



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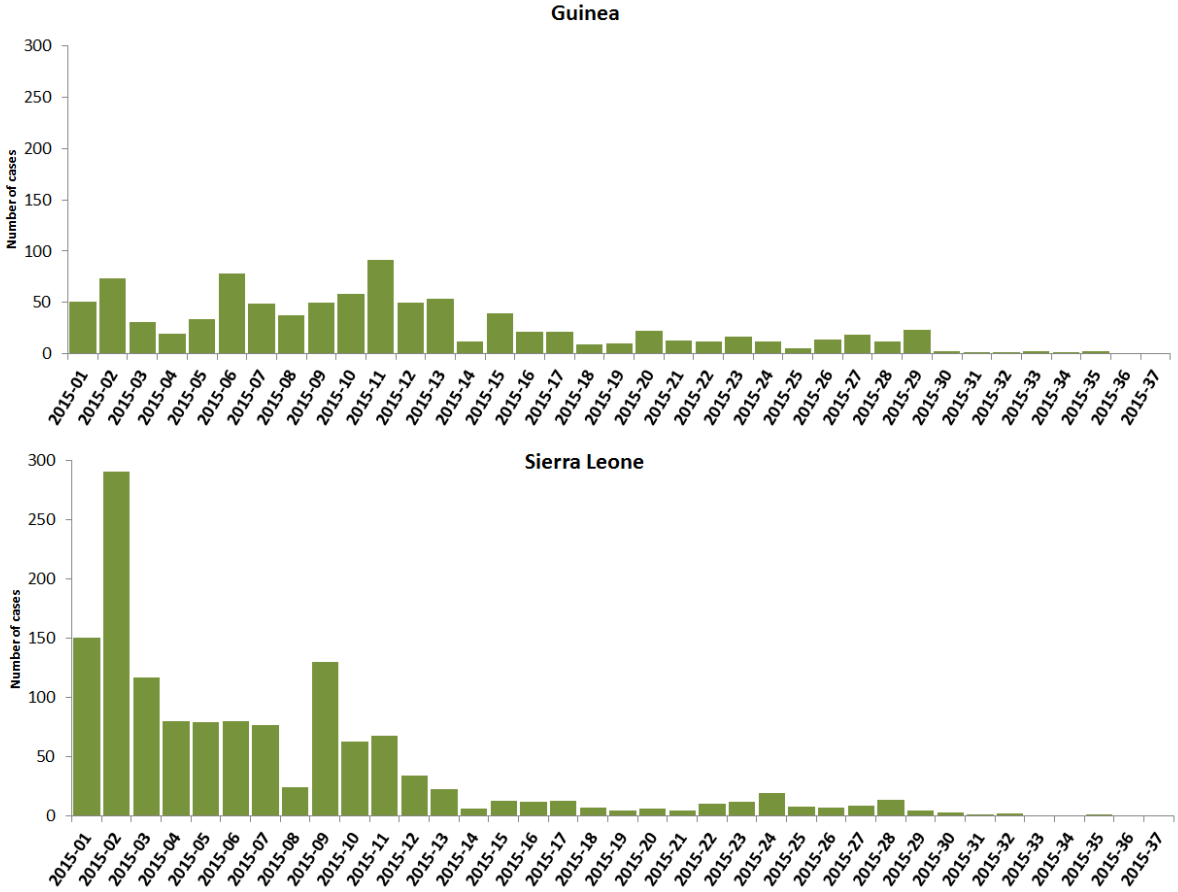
Distribution of confirmed cases of EVD by week of reporting in Guinea and Sierra Leone (weeks 01/2015 to 37/2015)

Adapted from WHO figures; *data for week 37/2015 are incomplete



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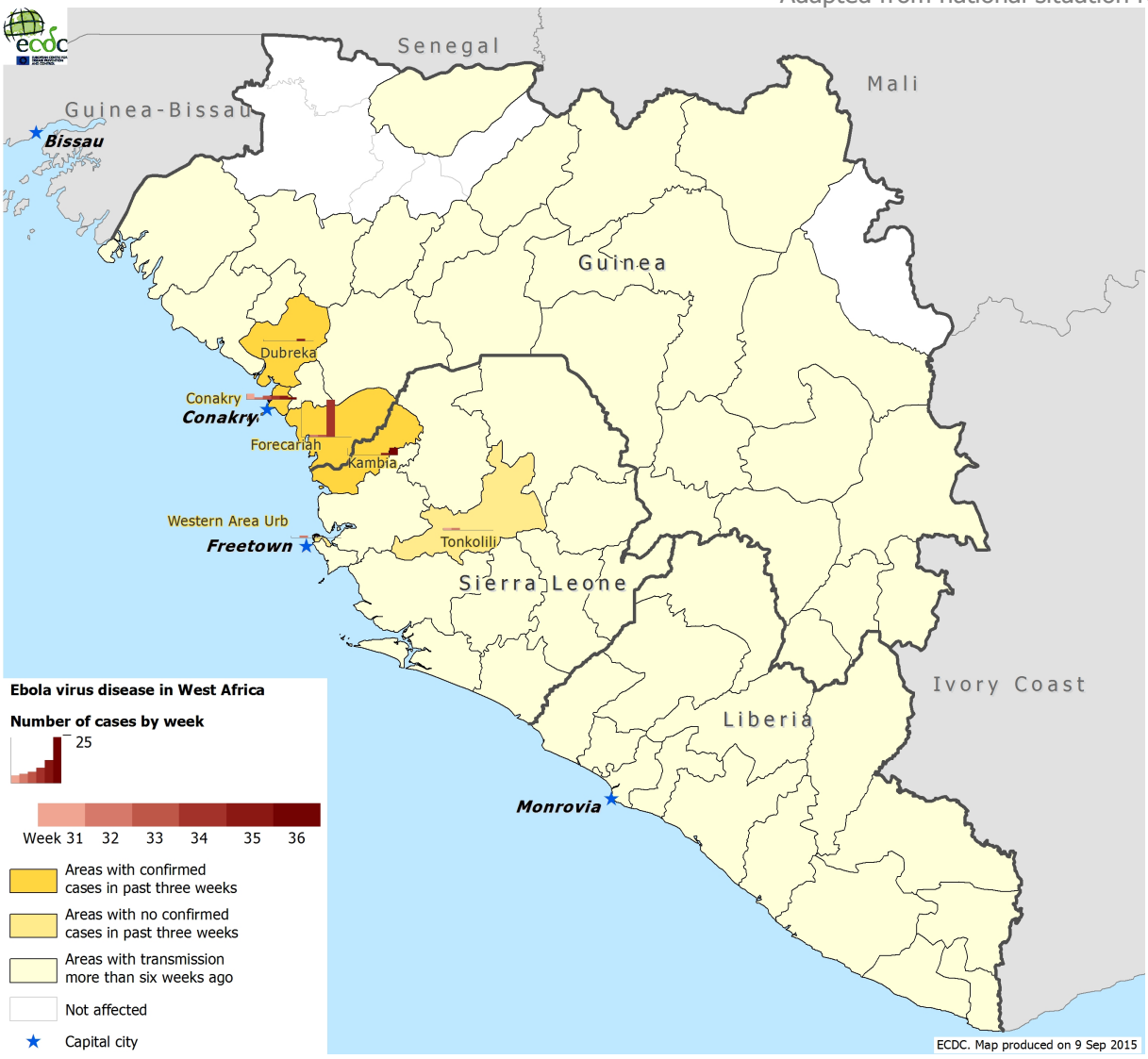
Distribution of confirmed cases of EVD by week of reporting in Guinea and Sierra Leone (as of week 36/2015)

Adapted from national situation reports



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

Opening date: 24 September 2012 Latest update: 11 September 2015

Epidemiological summary

Since April 2012 and as of 10 September, 1 579 cases of MERS-CoV have been reported by local health authorities worldwide, including 601 deaths.

Saudi Arabia: Since the last publication of the Rapid Risk Assessment on 27 August 2015, Saudi Arabia has reported 64 additional cases. Fifty-six of these cases occurred in the Riyadh region, two in Asir, two in Madinah and four in Najran. Forty-nine of the 64 cases had contact with a previously confirmed or suspected case either in the community or in a healthcare setting. Seventeen of the 64 cases were healthcare workers.

Jordan is reporting the country's eighth case of MERS this year five of which died.

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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

According to ECDC experts, the MERS outbreak 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, secondary transmission to unprotected close contacts, especially in healthcare settings, remains possible, as documented in South Korea.

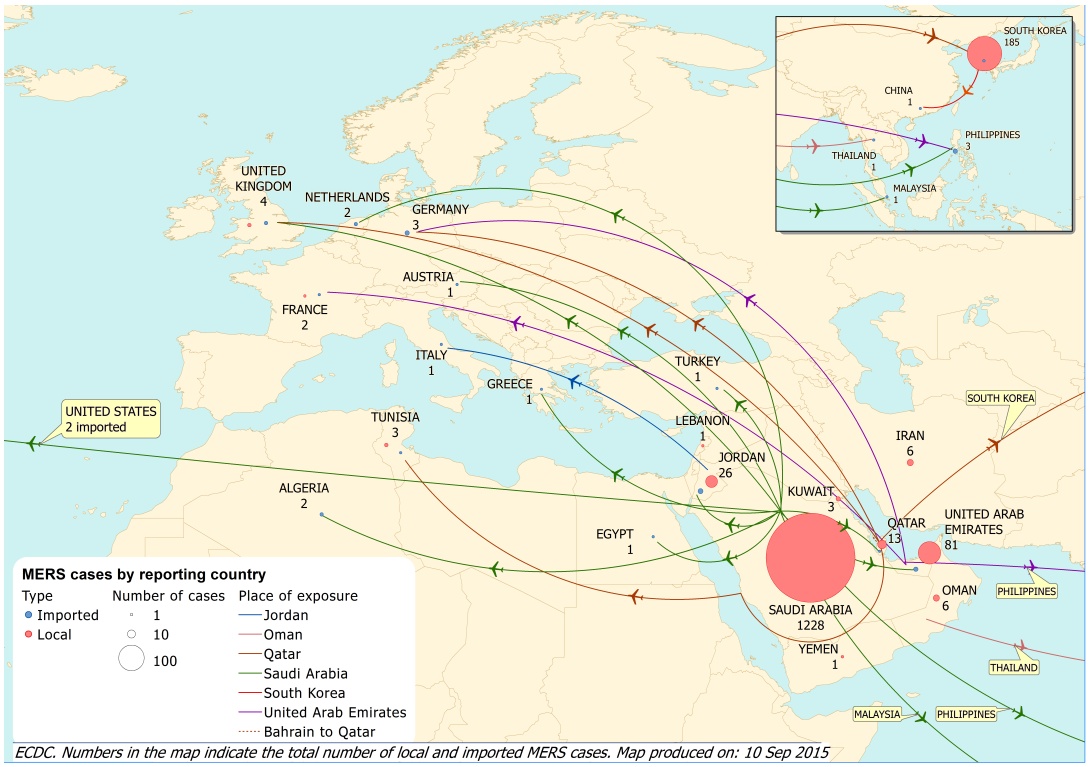
Countries should advise travellers returning from all countries affected by MERS to seek medical attention if they develop a respiratory illness with fever and cough during the two weeks after their return and to disclose their recent travel history to the healthcare provider. The travellers, especially 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. In addition, 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 27 August 2015 and an epi-update on 2 September 2015.

Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 10 September 2015 (n=1 579)

Source: ECDC



ECDC. Numbers in the map indicate the total number of local and imported MERS cases. Map produced on: 10 Sep 2015

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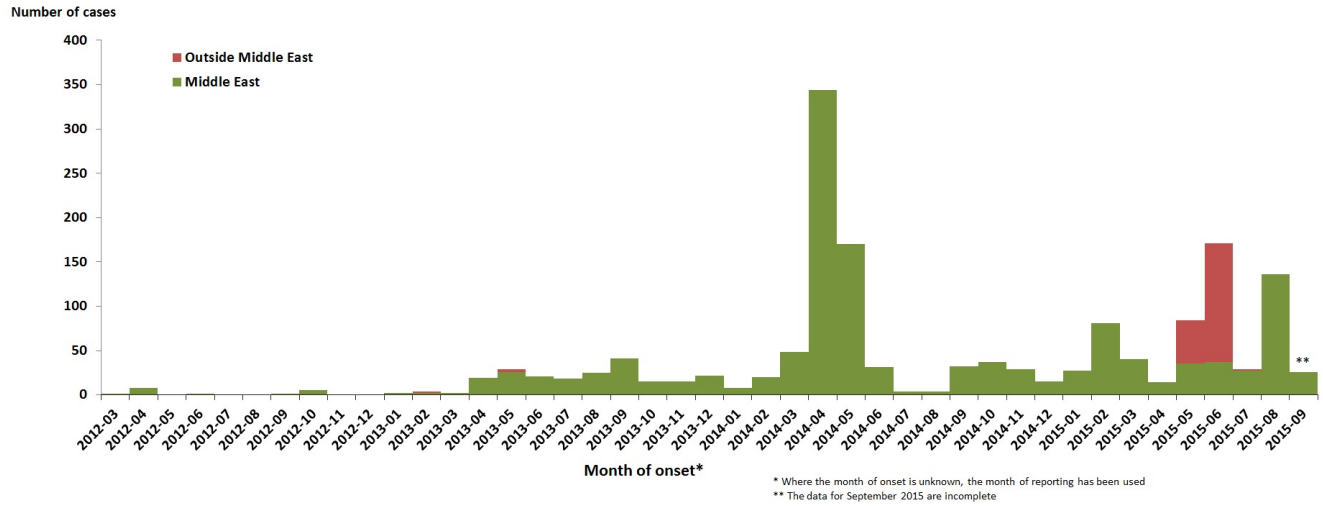
Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 10 September 2015 (n=1 579)

Source: ECDC



Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 10 September 2015 (n=1 579)

Source: ECDC

Region	Country	Number of cases	Number of deaths
Middle East	Saudi Arabia	1228	521
	United Arab Emirates	81	11
	Qatar	13	5
	Jordan	26	10
	Oman	6	3
	Kuwait	3	1
	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	**1579**	**601**

Chikungunya- Multistate (world) - Monitoring global outbreaks

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Opening date: 9 December 2013 Latest update: 27 August 2015

Epidemiological summary

Europe
Between 1 May and 7 September 2015, 19 imported cases of chikungunya virus infection were reported in France in the areas where the vector is present. No autochthonous cases of chikungunya were notified, according to InVS.

Americas
According to the latest update from the WHO Pan American Health Organization (WHO PAHO) on 4 September 2015, 32 656 new chikungunya cases (suspected and confirmed) have been reported in the Americas during the past two weeks. Since the beginning of the year and as of 4 September 2015, PAHO has reported 564 308 suspected and confirmed cases of chikungunya virus infection and 66 deaths in the WHO Region of the Americas. The cumulative number of cases has reached 1 711 947 since the start of the epidemic in December 2013.

In Central America, El Salvador accounted for most of the new cases during the past two weeks with nearly 2 000 suspected cases recorded. In South America, Colombia, which has recorded the highest number of cases so far this year, reported 5 126 new suspected and confirmed cases.

Pacific region
As of 9 September 2015, there are ongoing but decreasing outbreaks on Marshall Islands, Cook Islands and American Samoa, according to the Pacific Public Health Surveillance Network.

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

ECDC assessment

Epidemiological data indicate that the outbreaks are still expanding in the Caribbean and the Americas. 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 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 during the summer season in the EU is possible.

Actions

ECDC published a Rapid Risk Assessment on the chikungunya case without travel to endemic areas in Spain on 24 August 2015.

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

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