COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 42, 11-17 October 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: 15 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, in Europe, Hungary reported six new cases in three already affected areas: Budapest (3), Feijer (2), and Hajdu (1). Romania reported one new case in the already affected county of Ialomita. Austria reported one new case with the place of infection still under investigation. In neighbouring countries, Israel reported 25 new cases in already affected districts: Central (9), Tel Aviv (8), Northern (3), Southern (2) and Haifa (3).

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

Opening date: 2 October 2015 Latest update: 16 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 41.

➔Update of the week

In week 41, epidemiological data were reported by 38 countries, with nearly all reporting low influenza activity.

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Non EU Threats

New! Cholera -Iraq -2015

Opening date: 13 October 2015 Latest update: 15 October 2015

On 15 September 2015, the National IHR Focal Point for Iraq notified WHO of a cholera outbreak occurring in Bagdad, Babylon, Najaf, and Muthanna and Qadisiyyah Governorates. As of 8 October, 1 263 laboratory-confirmed cases of infection with *Vibrio cholerae*, serotype Inaba, including one fatal cholera case from Baghdad, have been reported from at least 15 governorates in Iraq. Cholera has frequently been reported from Iraq before. As with all cholera outbreaks there remains a concern that it could spread further, especially to settlements with vulnerable populations, such as internally displaced persons, whose numbers have now reached 3.2 million in Iraq, or across borders to neighbouring countries.

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 15 October 2015, WHO has reported 51 cases of wild poliovirus compared with 242 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 three new wild poliovirus type 1 (WPV1) cases in Afghanistan (1) and Pakistan (2). There was also one new circulating vaccine-derived poliovirus (cVDPV) case detected in Laos.

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

Opening date: 24 September 2012 Latest update: 8 October 2015

Since April 2012 and as of 15 October 2015, 1 616 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. The very recent hospital clusters in Riyadh in Saudi Arabia, and Amman in Jordan, are of concern because of the risk of spread linked to the recent Hajj pilgrimage in Saudi Arabia.

➔Update of the week

Since 8 October 2015, there have been four new cases reported from Saudi Arabia and three additional deaths of previously reported cases.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 15 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 13 October 2015, WHO has reported 28 466 cases of Ebola virus disease related to the outbreak in West Africa, including 11 297 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

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On 15 October, Guinea reported one new confirmed case (with data as of 13 October), according to WHO. The last previously reported case in Guinea was on 27 September. In Sierra Leone no new confirmed cases have been reported for four consecutive weeks.

On 9 October 2015, the UK notified an unusual late complication in an Ebola survivor. The case is a nurse who was diagnosed with EVD on 29 December 2014, after returning from Sierra Leone to Glasgow, via London. She is currently in a critical condition. As of 13 October, 62 close contacts have been identified in the UK for active follow-up, of whom 26 have received the rVSV-ZEBOV vaccine.

A study published in the *New England Journal of Medicine* found that preliminary results investigating the persistence of Ebola virus in bodily fluids show that some men still produce semen samples that test positive for Ebola virus nine months after the onset of symptoms.

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II. Detailed reports

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

Opening date: 2 June 2015 Latest update: 15 October 2015

Epidemiological summary

As of 14 October 2015, 104 cases of West Nile fever in humans have been reported in the EU Member States and 130 cases in the 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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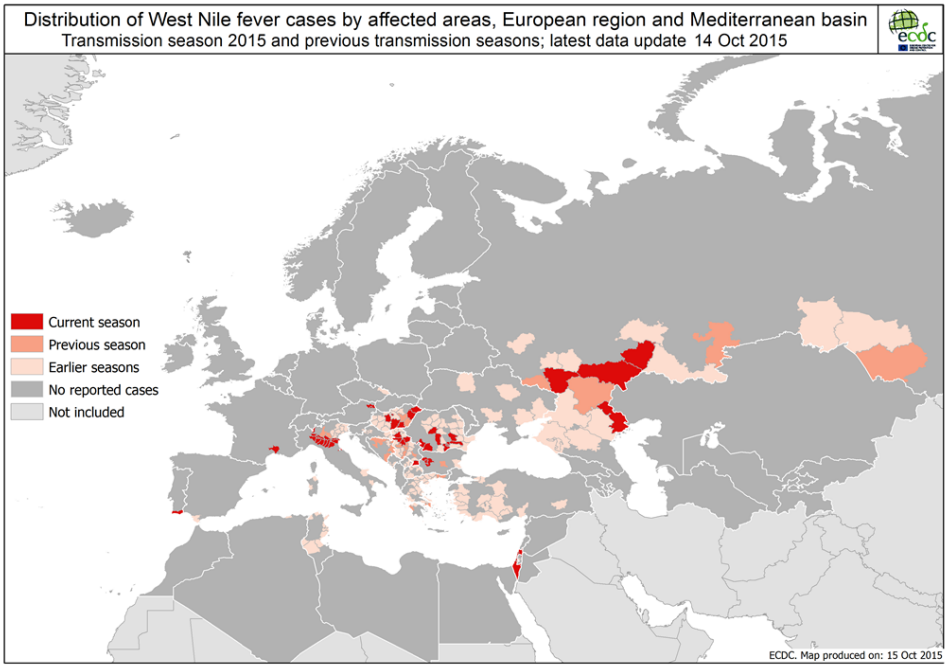
Source: ECDC



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

Opening date: 2 October 2015 Latest update: 16 October 2015

Epidemiological summary

Intensity of influenza activity continued to be at low levels in almost all of the 38 countries which reported data for week 41 in 2015. The percentage of samples testing positive for influenza virus was very low (<1%) with only one sentinel sample testing positive for influenza B virus.

ECDC assessment

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

Actions

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

New! Cholera -Iraq -2015

Opening date: 13 October 2015 Latest update: 15 October 2015

Epidemiological summary

As of 8 October, 1 263 laboratory-confirmed cases of infection with *Vibrio cholerae*, serotype Inaba, including one fatal cholera case from Baghdad, have been reported from Iraq. These cases have been reported from at least 15 governorates of the country: Babylon (469), Baghdad (304), Qadisiyyah (146), Muthanna (155), Basra (61), Wassit (41), Karbala (33), Najaf (32), Thi-qar (6), Maysan (6), Diyala (2), Duhok (2), Erbil (2), Kirkuk (2), Salah al-din (1) and Suleimaniyah (1).

In addition to this, there are several ongoing cholera outbreaks in Africa (Tanzania, Democratic Republic of the Congo, Kenya and South Sudan) and in the Caribbean region on Hispaniola Island (affecting both Haiti and the Dominican Republic). Cholera cases have also been reported in the province of Holguin, Cuba.

Web sources: WHO DON 12 October

ECDC assessment

This cholera outbreak has now spread to at least 15 governorates in Iraq. Cholera has frequently been reported from Iraq before. As with all cholera outbreaks there remains a concern that it could spread further, especially to settlements with vulnerable populations, such as internally displaced persons, whose numbers have now reached 3.2 million in Iraq, or across borders to neighbouring countries.

Actions

A cholera taskforce was established with the participation of UN agencies and the Ministry of Health is monitoring the situation closely to identify any sign or risks of spread of the disease to other places. In addition, WHO is preparing a vaccination plan and has deployed several experts to the field to assist the local health authorities in managing this outbreak.

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 242 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).
The latest case of cVDPV1, reported in Laos last week, is an unvaccinated eight-year-old boy. Based on epidemiological considerations and indications that the virus has been circulating for a prolonged period of time, this has been classified as circulating despite it being a single case.

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.

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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? |RRA Outbreak of circulating vaccine-derived poliovirus type 1 (cVDPV1) in Ukraine

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.

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

Opening date: 24 September 2012 Latest update: 8 October 2015

Epidemiological summary

As of 15 October, 1 616 cases of MERS, including 624 deaths, have been reported by local health authorities worldwide.

Saudi Arabia
The four newly reported cases this week were all female expatriates in their twenties in Riyadh. Two of the cases were contacts of previously known cases.

Jordan
One additional death was reported of a previously reported case.

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, secondary transmission to unprotected close contacts, especially in healthcare settings, remains possible, as documented in a recent outbreak in South Korea or Saudi Arabia.

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 27 August 2015 and an epi update on 2 September 2015.

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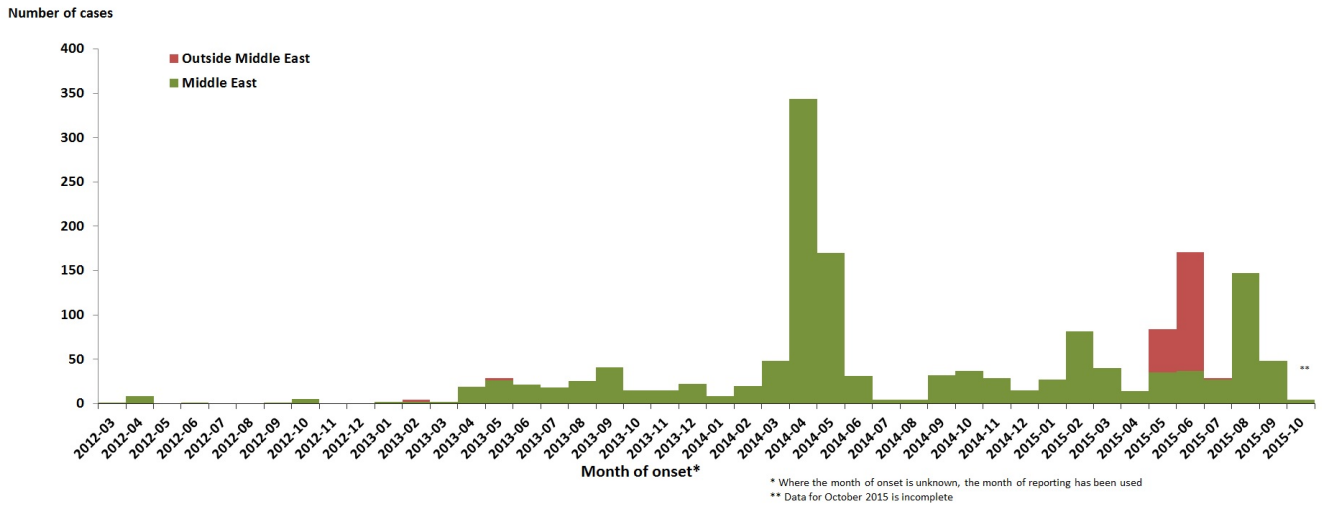
MERS-CoV by country of reporting, March 2012 – 15 October 2015 (n=1 616)

Source: ECDC

Region	Country	Number of cases	Number of deaths
Middle East	Saudi Arabia	1255	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

Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 15 October 2015 (n=1 616)

Source: ECDC



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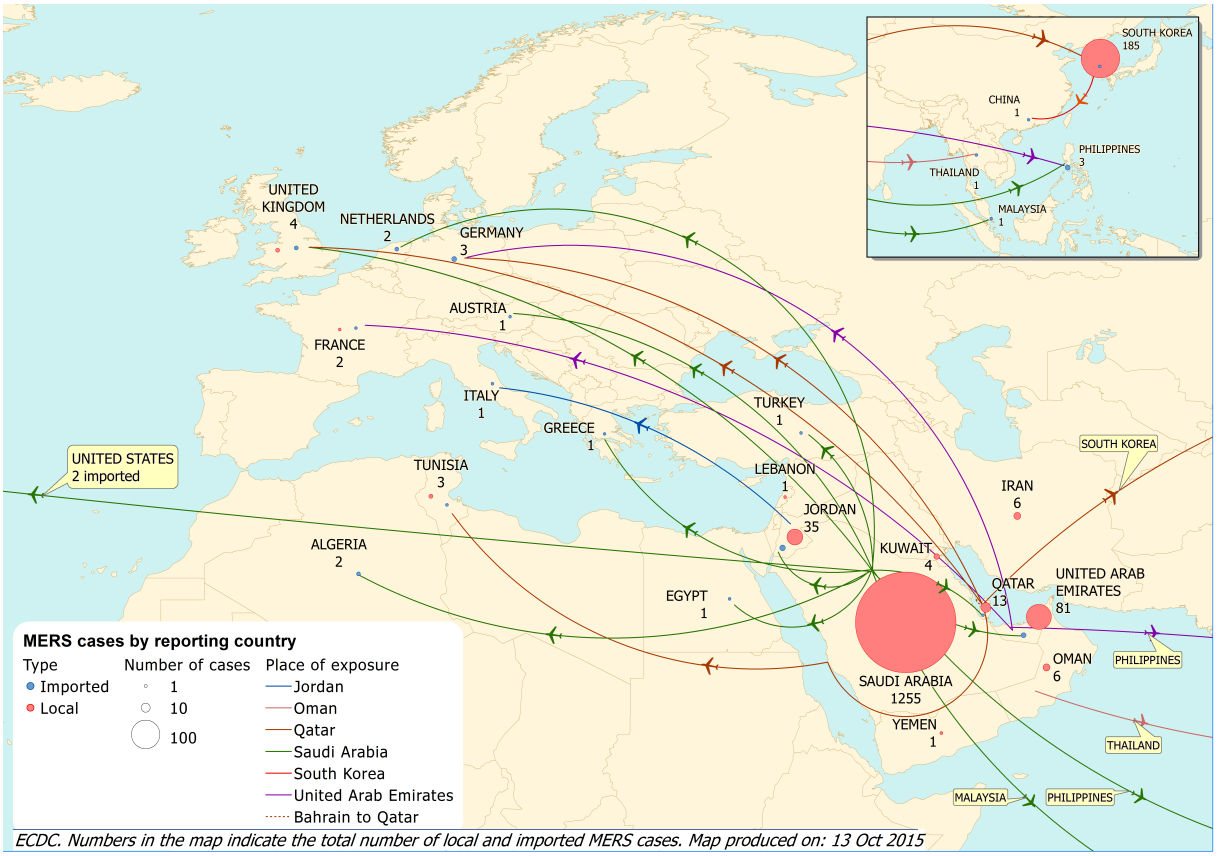
Source: ECDC



ECDC. Numbers in the map indicate the total number of local and imported MERS cases. Map produced on: 13 Oct 2015

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 15 October 2015

Epidemiological summary

Distribution of cases as of 13 October 2015:

Countries with intense transmission:

- **Guinea:** 3 802 cases, of which 3 345 were confirmed; 2 534 deaths.
- **Sierra Leone:** 13 992 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
On 15 October, Guinea reported one new confirmed case (with data as of 13 October), according to WHO. Prior to the reporting of this case, 150 contacts remained under follow-up in the prefecture of Forecariah in the week leading up to 13 October. All these contacts are associated with one chain of transmission centred on the Ratoma area in Conakry. In addition, 259 contacts have been identified but have so far proven untraceable in the past 42 days. Most of these untraced contacts are from Conakry and Forecariah. The four most recent cases in Forecariah were reported on 26 and 27 September from two villages in Forecariah. They were infected by an unregistered contact of a probable case linked to the Ratoma chain of transmission. The ring vaccination trial is continuing in Guinea. All rings comprised contacts, and contacts of contacts associated with confirmed cases now receive immediate vaccination with the rVSV-ZEBOV Ebola vaccine.

Sierra Leone
No new confirmed cases were reported for the fourth 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 has been extended from Guinea to Sierra Leone.

Situation among healthcare workers
No new health worker infections were reported by WHO in the week up to 11 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

As of 13 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 will report this threat on a weekly basis

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in the CDTR.

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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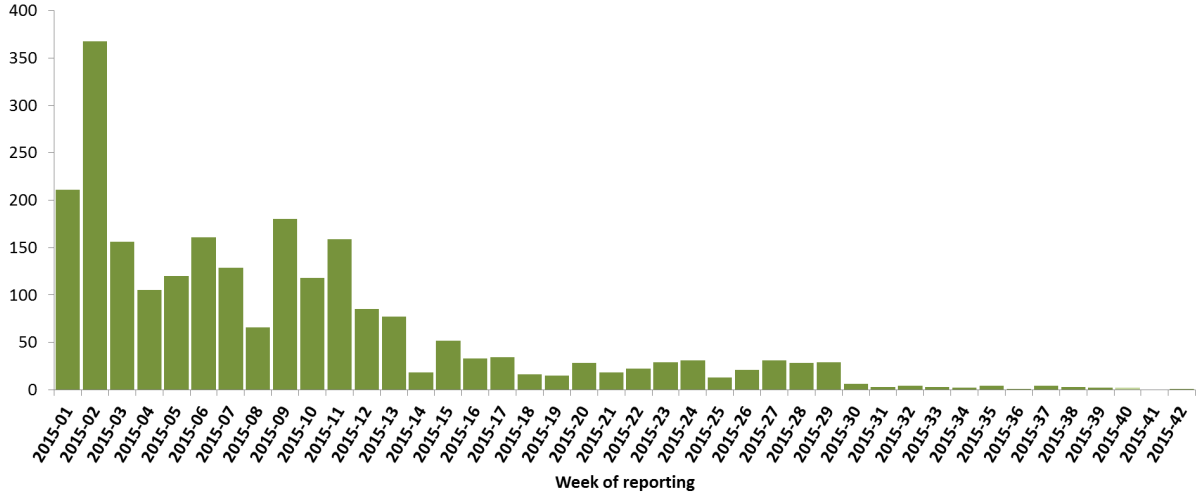
Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 01/2015 to 42/2015)

Adapted from WHO figures; *data for week 42/2015 are incomplete



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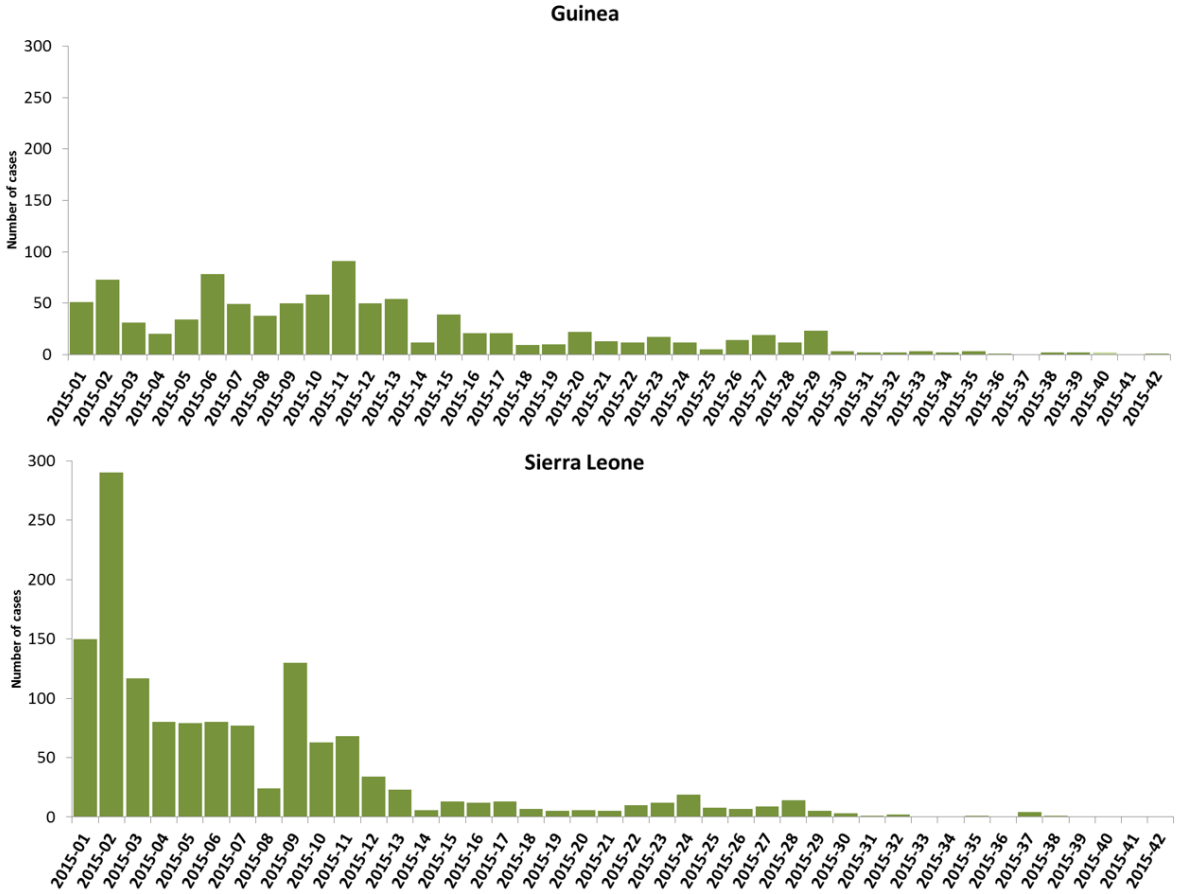
Distribution of confirmed cases of EVD by week of reporting in Guinea and Sierra Leone (weeks 01/2015 to 42/2015)

Adapted from WHO figures; *data for week 42/2015 are incomplete



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