COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 8, 15-21 February 2015

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Influenza – Multistate (Europe) – Monitoring 2014–2015 season

Opening date: 9 October 2014 Latest update: 20 February 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 the results on its website in the weekly Flu News Europe.

➔Update of the week

For week 07/2015, 15 countries reported stable and increasing influenza activity. The overall proportion of influenza positive samples and the total number of sentinel influenza virus detections decreased slightly which may be indicative of several countries having passed their peaks of influenza activity. Of 2 588 sentinel specimens, 1 268 (49%) tested positive for influenza virus with positive detections being made in all 33 countries that reported virological data. Influenza A(H1N1)pdm09, A(H3N2) and type B viruses continued to circulate in the region, with A(H3N2) predominating.

Botulism in people who inject drugs - Norway and the UK - 2015

Opening date: 5 January 2015 Latest update: 20 February 2015

Since December 2014, 25 cases of botulism have been reported in Norway (10) and Scotland (15) affecting people who inject drugs (PWID). Four additional cases are under investigation in Scotland. These cases raise the possibility that a batch of contaminated heroin is in circulation.

➔Update of the week

Since the last weekly bulletin, two new cases of wound botulism have been reported in people who inject drugs in Oslo, Norway.

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Non EU Threats

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 19 February 2015

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission stops and the world is 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 the international spread of wild poliovirus during 2014. On 14 November, the Temporary Recommendations in relation to PHEIC were extended for a further three months.

➔Update of the week
During the past week, no new wild poliovirus type 1 (WPV1) cases were reported by WHO.

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

Opening date: 24 September 2012 Latest update: 19 February 2015

Since April 2012, 1 040 cases of MERS-CoV have been reported by local health authorities worldwide, including 414 deaths. To date, all cases have either occurred in the Middle East, have direct links to a primary case infected in the Middle East, or have returned from this area. The source of the virus remains unknown, but the pattern of transmission and virological studies points 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 the last update of 10 February 2015 and as of 19 February, Saudi Arabia has reported 35 additional cases of MERS-CoV.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 5 February 2015

An epidemic of Ebola virus disease (EVD) has been ongoing in West Africa since December 2013, mainly affecting Guinea, Liberia and Sierra Leone. The situation in the affected countries remains serious. 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 15 February, WHO is reporting 23 253 cases of Ebola virus disease (EVD) related to the outbreak in West Africa, including 9 380 deaths.

According to the weekly WHO situation update posted on February 18, Ebola activity stabilised in West Africa last week with 128 newly confirmed Ebola cases reported in the three countries compared with 144 during the previous week.

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II. Detailed reports

Influenza – Multistate (Europe) – Monitoring 2014–2015 season

Opening date: 9 October 2014 Latest update: 20 February 2015

Epidemiological summary

Excess all-cause mortality among the elderly (aged 65 years and above), concomitant with increased influenza activity and the predominance of A(H3N2) viruses, has been observed in recent weeks in seven of 15 reporting countries: Belgium, France, Greece, Portugal, Spain, Switzerland and the United Kingdom (England, Scotland and Wales). Across all countries, a pooled analysis shows a higher level of mortality among elderly people than in the four previous seasons (see the European project for monitoring excess mortality for public health action, EuroMOMO at http://www.euromomo.eu/).

The majority of A(H3N2) viruses characterised so far exhibit antigenic differences from the virus included in the 2014–2015 northern hemisphere influenza vaccine. A reduction in the effectiveness of the A(H3N2) component of the vaccine may be expected, which in turn may contribute to the excess mortality reported among elderly people in nine European countries. The vaccine is still expected to provide some cross-protection against A(H3N2) viruses which may reduce the likelihood of severe outcomes, such as hospitalisation or death, in some cases. The A(H1N1)pdm09 and B components of the vaccine are likely to be effective.

The circulation of respiratory syncytial virus (RSV) has decreased across the Region, following peak activity during the first two weeks of 2015.

Web sources: Flu News Europe | ECDC Influenza |

ECDC assessment

The influenza activity continues, particularly in western and central European countries.

Actions

ECDC and WHO produce the Flu News Europe bulletin weekly.

Botulism in people who inject drugs - Norway and the UK - 2015

Opening date: 5 January 2015 Latest update: 20 February 2015

Epidemiological summary

On 29 December 2014, the Norwegian Institute of Public Health (NIPH) was notified of one case of wound botulism in a heroin-injecting drug user residing in the Oslo area. The patient developed symptoms on 26 December. As of 19 February 2015, the NIPH has reported ten cases in the Oslo area since December 2014.

Since 1 January and as of 10 February 2015, Public Health Scotland notified 15 cases of botulism among people who inject drugs. Four patients remain under investigation, with botulism as a possible cause (these are currently not counted as cases).

The hypothesis that these cases are the result of a single batch of heroin contaminated with *C. botulinum* spores remains to be positively confirmed.

Web sources: NHS | Folkhelseinstitutet |Public Health Scotland

ECDC assessment

Botulism in people who inject drugs has been reported in recent years in several European countries and the USA. Cases occurring in two EU Member States during a short time period indicate that a batch of heroin may have been contaminated with spores of the anaerobic bacterium *Clostridium botulinum*.

Given the complex international distribution chain of heroin, the exposure of people who inject drugs in other EU Member States cannot be excluded. Member States should consider increasing awareness in healthcare settings to support prompt diagnosis and treatment as well as reporting to appropriate public health authorities. In addition, heroin users, their social networks, drug

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treatment and harm reduction services should be alerted to the signs and symptoms of wound botulism infection and the importance of seeking immediate medical treatment.

Actions

On 14 February, ECDC published an updated rapid risk assessment in collaboration with EMCDDA.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 19 February 2015

Epidemiological summary

Worldwide in 2015, seven WPV1 cases have been reported to WHO, compared with 18 for the same period in 2014.
In 2014, nine countries reported cases: Pakistan (304 cases), Afghanistan (28 cases), Nigeria (6 cases), Equatorial Guinea (5 cases), Somalia (5 cases), Cameroon (5 cases), Iraq (2 cases), Syria (1 case), and Ethiopia (1 case).

No new cVDPV cases were reported in the past week. Worldwide, 54 cases of cVDPV were reported in 2014.

The fourth meeting of the IHR Emergency Committee on the international spread of wild poliovirus meeting took place on 17 February via a teleconference. The Emergency Committee (EC) decided to recommend to the Director General of WHO that the international spread of wild poliovirus continues to constitute a Public Health Emergency of International Concern (PHEIC). The EC continues to formulate the temporary recommendations through e-mail exchanges, and if required, during a follow-up teleconference.

Media report that four members of a polio immunisation team have been found dead after being kidnapped by local militants in southwest Pakistan. Opposition from militants and attacks on immunisation teams have now claimed 71 lives in Pakistan since December 2012.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet |Temporary Recommendations to Reduce International Spread of Poliovirus

ECDC assessment

Europe is polio-free. The last polio cases within the current EU borders were reported from Bulgaria in 2001. The most recent 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 WPV in several countries and the documented exportation of WPV to other countries support the fact that there is a potential risk for WPV 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? | WHO statement on the meeting of the International Health Regulations Emergency Committee concerning the international spread of wild poliovirus, 5 May 2014 | WHO statement on the third meeting of the International Health Regulations Emergency Committee regarding the international spread of wild poliovirus, 14 November 2014

Actions

ECDC follows 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 to 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.

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

Opening date: 24 September 2012 Latest update: 19 February 2015

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Epidemiological summary

Since April 2012 and as of 19 February 2015, 1 040 cases of MERS-CoV have been reported by local health authorities worldwide, including 414 deaths.

The distribution is as follows:

Confirmed cases and deaths by region:
Middle East
Saudi Arabia: 897 cases/377 deaths
United Arab Emirates: 74 cases/10 deaths
Qatar: 10 cases/4 deaths
Jordan: 19 cases/6 deaths
Oman: 5 cases/3 deaths
Kuwait: 3 cases/1 death
Egypt: 1 case/0 deaths
Yemen: 1 case/1 death
Lebanon: 1 case/0 deaths
Iran: 5 cases/2 deaths

Europe
Turkey: 1 case/1 death
UK: 4 cases/3 deaths
Germany: 2 cases/1 death
France: 2 cases/1 death
Italy: 1 case/0 deaths
Greece: 1 case/1 death
Netherlands: 2 cases/0 deaths
Austria: 1 case/0 deaths

Africa
Tunisia: 3 cases/1 death
Algeria: 2 cases/1 death

Asia
Malaysia: 1 case/1 death
Philippines: 2 cases/0 deaths

Americas
United States of America: 2 cases/0 deaths

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 | ECDC factsheet for professionals

ECDC assessment

The source of MERS-CoV infection and the mode of transmission have not been identified. Dromedary camels are a host species for the virus, and many of the primary cases in MERS-CoV clusters have reported direct or indirect camel exposure. There is therefore a continued risk of cases presenting in Europe following exposure in the Middle East and international surveillance for MERS-CoV cases remains essential.

The risk of secondary transmission in the EU remains low and can be further reduced by 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 last rapid risk assessment was updated on 21 January 2015.
ECDC is closely monitoring the situation in collaboration with WHO and EU Member States.
ECDC published a factsheet for health professionals regarding MERS-CoV on 20 August 2014.

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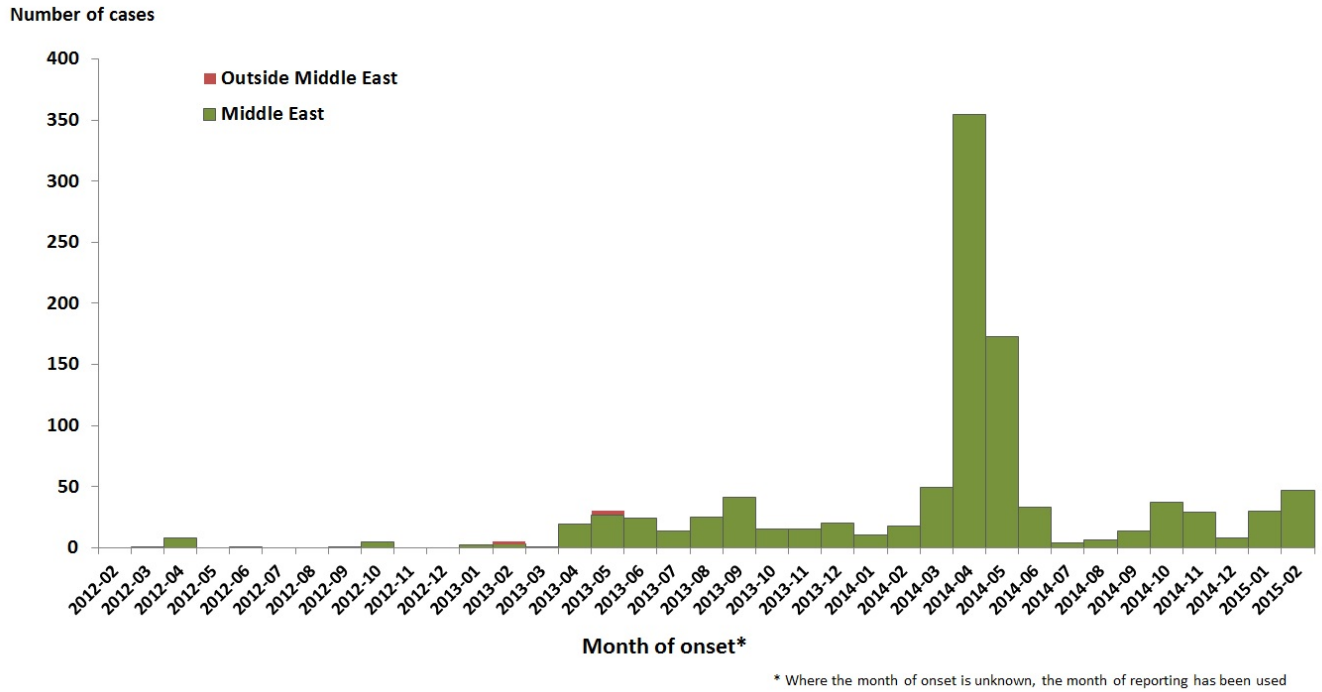
Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 19 February 2015 (n=1040)

Source: ECDC



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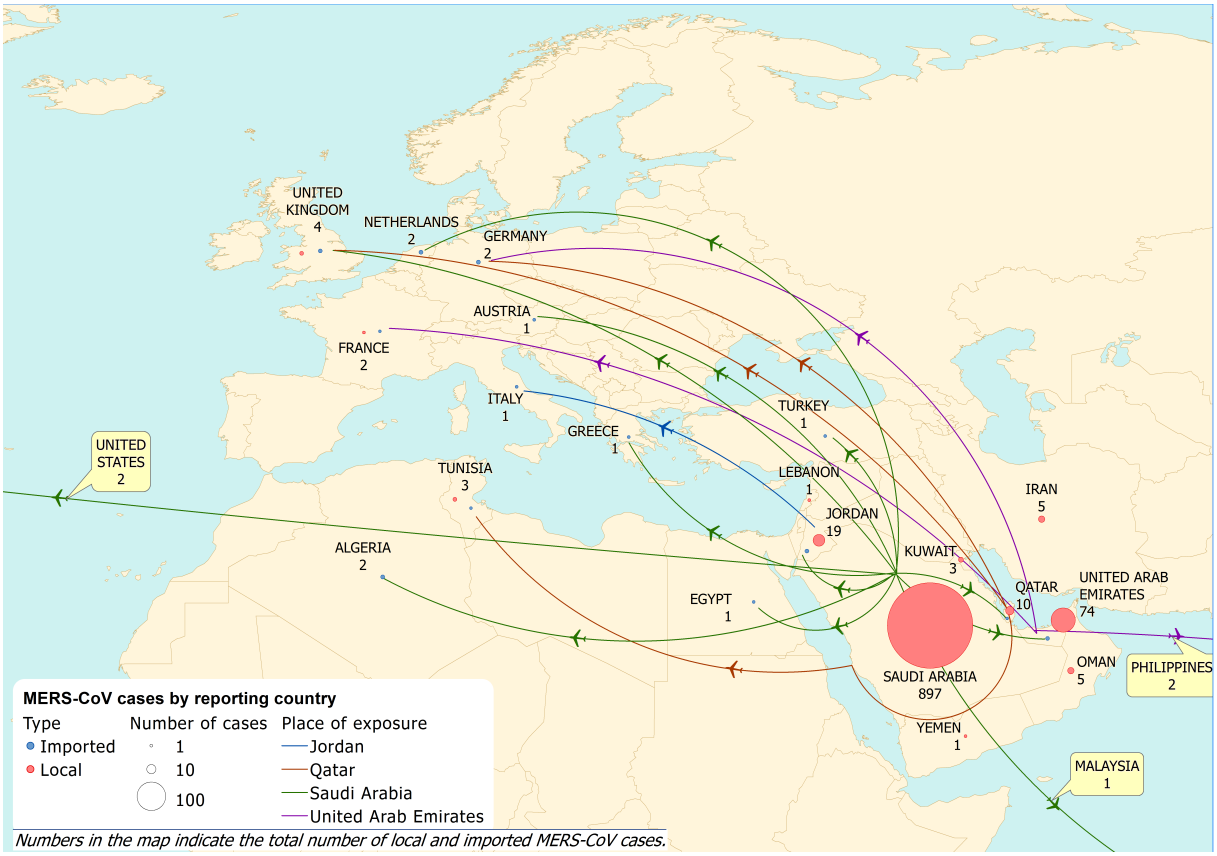
Geographical distribution of confirmed MERS-CoV cases and place of probable infection, worldwide, as of 19 February 2015 (n=1040)

Source: ECDC



Numbers in the map indicate the total number of local and imported MERS-CoV cases.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 5 February 2015

Epidemiological summary

Distribution of cases as of 15 February:

Countries with intense transmission:

Distribution of EVD cases for countries with intense transmission:

- Guinea: 3 108 cases and 2 057 deaths (as of 15 February 2015)
- Liberia: 9 007 cases and 3 900 deaths (as of 12 February 2015)
- Sierra Leone: 11 103 cases and 3 408 deaths (as of 15 February 2015)

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Countries with an initial case or cases, or with localised transmission:

- United Kingdom: one confirmed case on 29 December 2014.
- Mali, Nigeria, Senegal, Spain and the United States have been declared free of EVD after having cases related to the current epidemic in West Africa.

Situation in specific West African countries
Guinea saw a slight decrease in case numbers, reporting 52 new confirmed cases compared with 65 the week before. Last week, 16 Ebola cases were confirmed during post-mortem testing and there were 39 unsafe burials. Serious security incidents have recently been reported in 13 prefectures including Boffa, Conakry, Coyah, Dubreka, and Forecariah.

Widespread transmission continued in Sierra Leone, where cases have plateaued at around 60-70 a week. There were 45 unsafe burials reported and 25 new Ebola cases were only identified after people had died in the community. Four of 14 districts reported at least one security incident in the week to 11 February. According to media, Sierra Leone launched a two-week door-to-door surveillance on 18 February for unreported Ebola cases in Port Loko, in the west of the country with the participation of healthcare workers and security personnel. The district, located 100 kilometres from Freetown, reported a surge in new cases last week, associated with unsafe burial practices and hidden Ebola patients.

Liberia reported two confirmed cases originating from the same area of Montserrado County, linked to a single chain of transmission. Six districts reported at least one security incident in the week to 11 February due to misinformation about the presence of Ebola virus in shots used for routine vaccination.

Situation among healthcare workers
There were 833 confirmed cases as of 15 February, including 488 deaths, among healthcare workers in the three countries with intense and widespread transmission.

Medical evacuations and repatriations from EVD-affected countries
Thirty-six individuals have been evacuated or repatriated worldwide from the EVD-affected countries. As of 19 February, there have been 12 medical evacuations of confirmed EVD-infected patients to Europe (three to Germany, two to Spain, two to France, one to the UK, one to Norway, one to Italy, one to the Netherlands and one to Switzerland). Fourteen persons exposed to Ebola who then tested negative have been repatriated to Europe (five to UK, three to Sweden, two to the Netherlands, one to Denmark, one to Germany, one to Spain and one to Switzerland). Ten persons have been evacuated to the United States.

Since the last update, two medical evacuations have been reported.
On Sunday 15 February, media reported that a healthcare worker has been repatriated to Omaha, Nebraska, USA after exposure to Ebola virus. The worker has not shown symptoms.
On 17 February, Public Health England confirmed that, as a highly precautionary measure, a UK healthcare worker who had potential contact with the Ebola virus while working in Sierra Leone, has been repatriated to the UK for assessment and monitoring.

Figures

First epi-curve: distribution of reported cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia, Nigeria, Mali and Senegal, weeks 48/2013 to 08/2015 **
* In week 45/2014, WHO carried out retrospective correction in the data, resulting in 299 fewer cases being reported, which resulted in a negative value for new cases in week 45 which is not plotted.
** According to WHO, the marked increase in the cumulative total number of cases in week 43 is due to a more comprehensive assessment of patient databases, leading to 3 792 additional reported cases. However, these cases have occurred throughout the epidemic period.

Second epi-curve: Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission, as of week 08* 2015.
* The marked increase in the number of cases reported in Sierra Leone (week 44) and Liberia (week 43) resulted from a more comprehensive assessment of patient databases. The additional 3 792 cases have occurred throughout the epidemic period.
** In week 45/2014, WHO reported -476 cases in Sierra Leone due to retrospective corrections.

§ In week 44/2014, WHO reported zero cases for Liberia.

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Web sources: ECDC Ebola page | ECDC Ebola and Marburg fact sheet | WHO Ebola Factsheet | CDC | WHO Roadmap | Sierra Leone media report | US medical evacuation | UK medical evacuation |

ECDC assessment

This is the largest ever documented epidemic of EVD 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 EVD being imported into the EU or the risk of transmission occurring within the EU remains low or very low due to the range of risk reduction measures that have been put in place by the Member States and the affected countries. However, continued vigilance is essential in order to ensure that re-entry standards do not lapse.

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.

Unsafe burials continue in Guinea and Sierra Leone, and cases continue to be detected in the community rather than among known contacts of Ebola patients. Engaging effectively with communities continues to present a challenge in several areas as each of the three countries reported an increase in security incidents related to the Ebola response compared with the previous week.

Actions

As of 19 February 2015, ECDC has deployed 34 experts within and outside the EU in response to the Ebola outbreak. This includes an ECDC mobilised contingent of experts to Guinea. Furthermore, 14 additional experts are confirmed for deployment to Guinea over the next four months while additional deployments are envisaged but still pending confirmation.

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. ECDC's role is to organise the technical support for contact tracing and epidemiological surveillance in the Guinèe Forestière region under the GOARN mechanism. Individual experts are invited to contribute by deploying on 6-week missions with departure from March to June. The ECDC teams in Guinèe Forestière are currently based in N'zerekoré town. For further information, please contact Niklas Danielsson, Response group leader at: niklas.danielsson@ecdc.europa.eu with cc to support@ecdc.europa.eu

An epidemiological update is published weekly on the EVD ECDC page
On 4 February 2015, ECDC published an updated rapid risk assessment
On 22 January 2014, 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-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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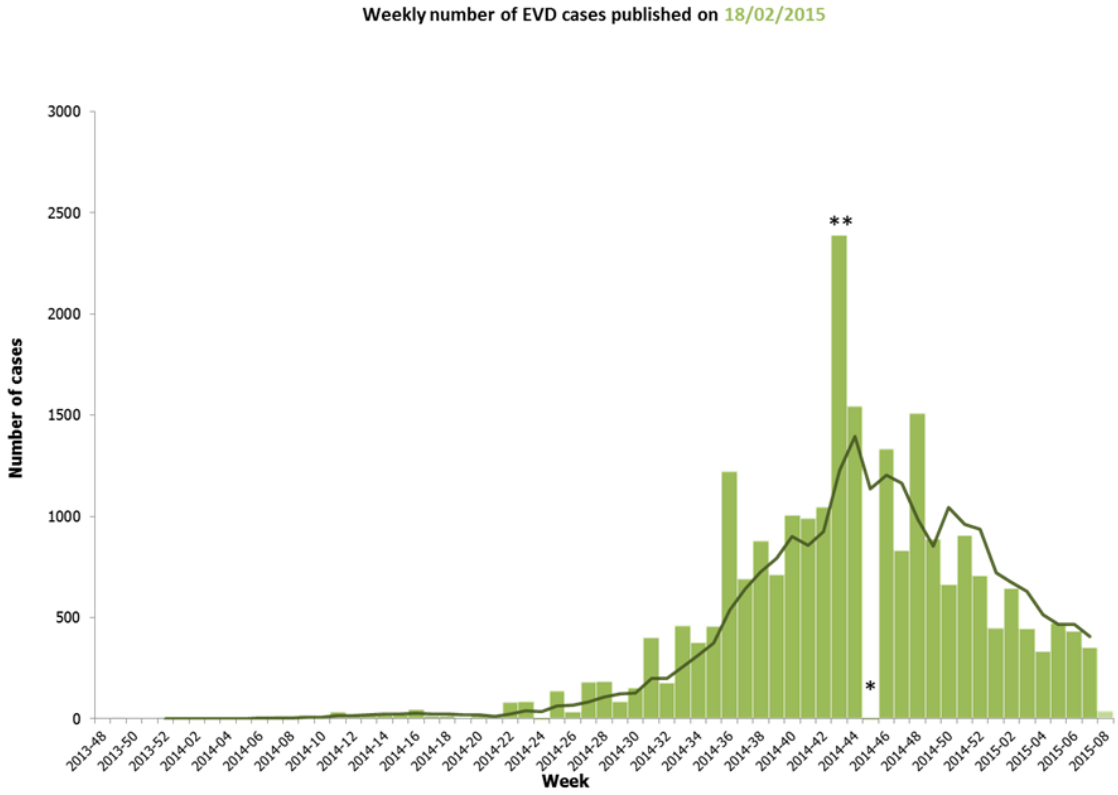
Distribution of reported cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia, Mali, Nigeria and Senegal, weeks 48/2013 to 08*/2015

Source: Adapted from WHO figures; *data for week 08/2015 are incomplete



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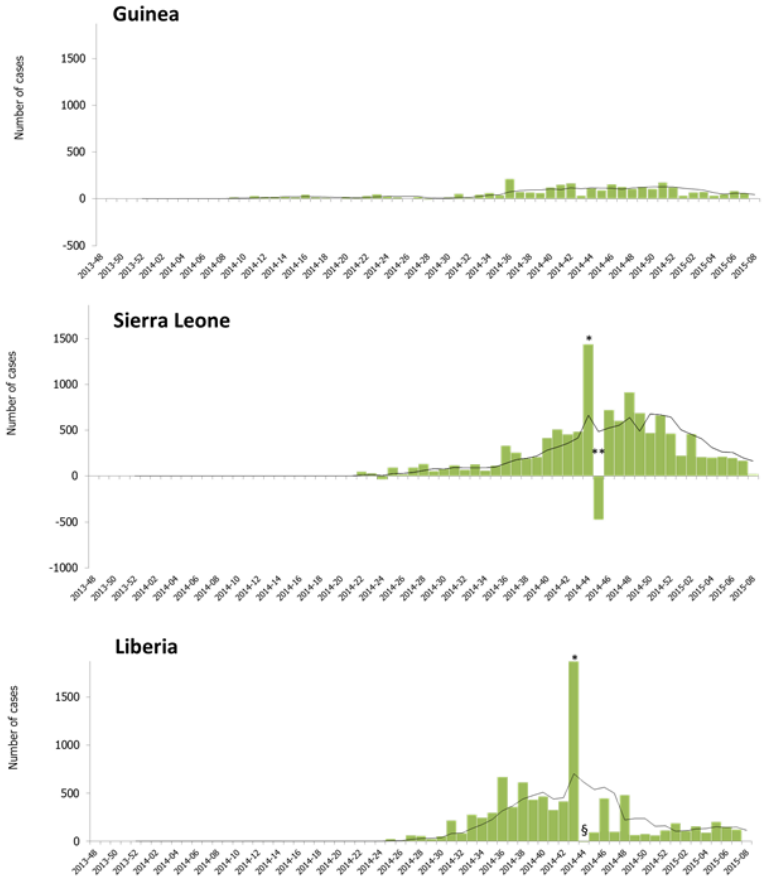
Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission, as of week 08* 2015

Source: Adapted from WHO figures; *data for week 08/2015 are incomplete



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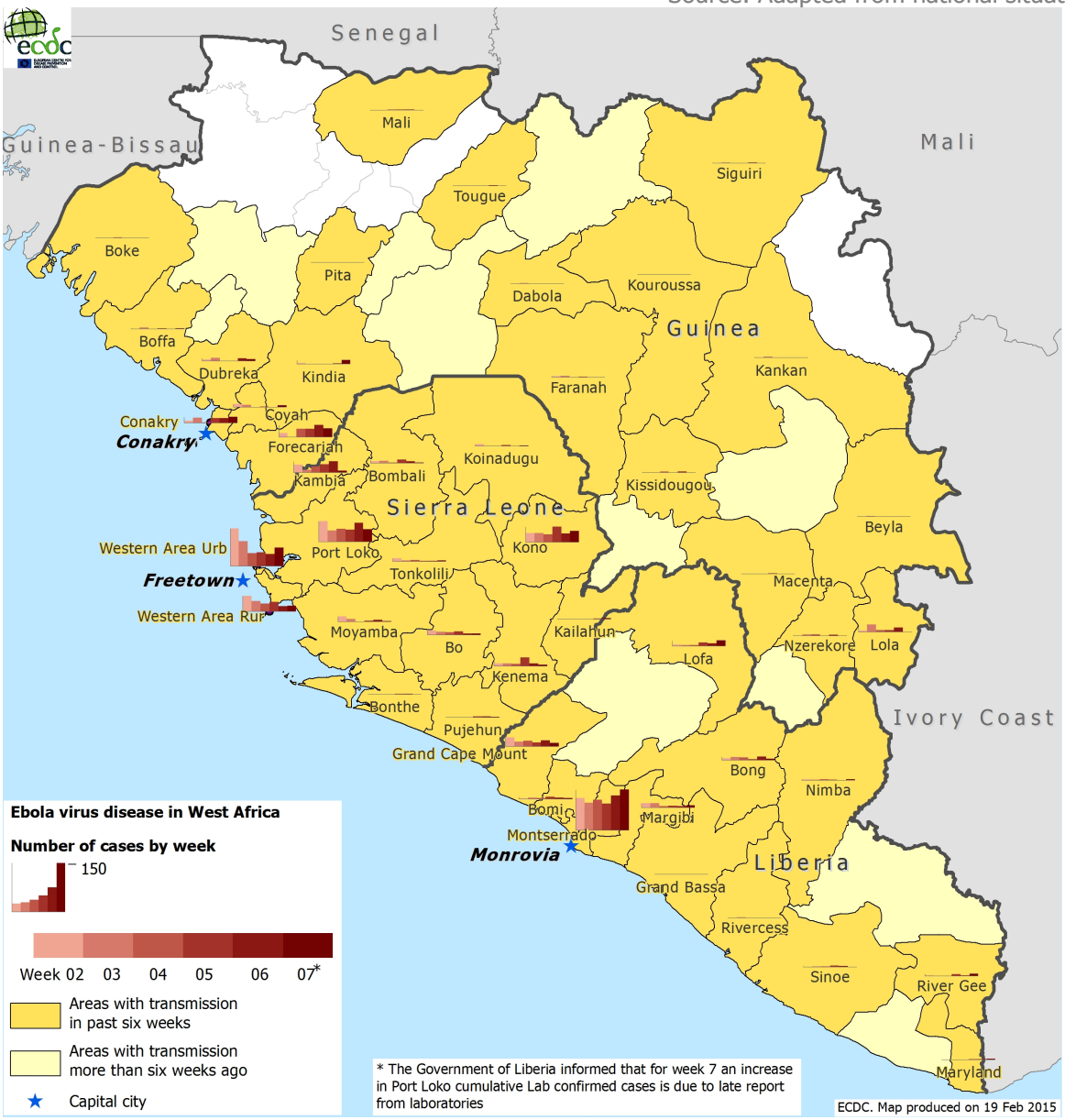
Distribution of cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (as of week 07/2015)

Source: Adapted from national situation reports



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