

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: 2 April 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.

→ Update of the week

Influenza activity is decreasing in most reporting countries but the proportion of influenza virus positive samples remains high (37%). For 15 weeks (since week 51/2014), the positivity rate has been over the threshold of 10 per cent, indicating seasonal influenza activity. Influenza A(H1N1)pdm09, A(H3N2) and type B viruses continue to circulate in the region, with a dominance of type B viruses.

Non EU Threats

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 2 April 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 27 February 2015, the Temporary Recommendations in relation to PHEIC have been extended for another three months.

→ Update of the week

In the past week, there was no new wild poliovirus type 1 (WPV1) case reported by WHO.

Environmental surveillance in Pakistan indicates widespread transmission of the virus, not only in known infected areas but also in areas without cases. Strategies are focusing on identifying reasons for children that have missed vaccination and area-specific mechanisms are implemented to overcome specific challenges.

The Ebola crisis in western Africa continues to have an impact on the implementation of polio eradication activities in Liberia, Guinea and Sierra Leone. National Immunization Days are scheduled for the three Ebola-affected countries in April, May and June (depending on the country).

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

Opening date: 24 September 2012

Latest update: 1 April 2015

Since April 2012 and as of 2 April 2015, 1 118 cases of MERS-CoV have been reported by local health authorities worldwide, including 458 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 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 the last update in 24 March 2015, Saudi Arabia has reported eight additional cases of MERS-CoV infections. The cases were reported from Jeddah (3), Makkah (1), Riyadh (1) Ehssa (1), Eastern Province (1) and Tabuk (1). Seven out of the eight cases were male. The median age was 62 years and the age range is between 30 to 80 years. One of the cases was reported as a healthcare worker with contact with a case and one was classified as a contact of a case in the community. Three deaths were recorded among previously reported cases.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014

Latest update: 2 April 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 29 March 2015, [WHO](#) reported 25 213 cases of Ebola virus disease related to the outbreak in West Africa, including 10 460 deaths.

In the week leading to 29 March, WHO reported 82 new confirmed cases of Ebola virus disease, compared with 79 cases the previous week. Fifty-seven new cases were reported from Guinea and 25 from Sierra Leone. No cases were reported from Liberia. The geographic area of transmission also increased, especially in Guinea where seven prefectures reported cases, compared to three the previous week.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 1 April 2015

Dengue fever is one of the most prevalent vector-borne diseases, affecting 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 south of France in 2014 further underline the importance of surveillance and vector control in other European countries.

→Update of the week

There are ongoing outbreaks of dengue fever globally.

Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013

Latest update: 1 April 2015

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

→Update of the week

Since 6 March 2015 and as of 27 March, WHO Pan American Health Organization (WHO PAHO) has reported 83 405 new cases of chikungunya virus infection in the Pan American region. Since the beginning of the outbreak in December 2013, there have been 184 deaths.

II. Detailed reports

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

Opening date: 9 October 2014

Latest update: 2 April 2015

Epidemiological summary

For week 13/2015:

Hospitalized influenza cases were reported mainly among people aged 65 years and above (52%).

Excess all-cause mortality among people aged 65 years and above, concomitant with increased influenza activity and the predominance of A(H3N2) viruses, has been observed in most countries participating in the EuroMOMO project but currently seems to be decreasing in many, but not all countries (see [EuroMOMO](#)).

Approximately two-thirds of the A(H3N2) viruses characterized to date show antigenic differences compared to the virus included in the 2014–2015 northern hemisphere influenza vaccine. The observed reduction in effectiveness of the A(H3N2) component of the vaccine may have contributed to the excess mortality reported among older age groups. The A(H1N1)pdm09 and B components of the vaccine are likely to be effective.

There are no indications of reduced sensitivity of influenza A or B viruses to the neuraminidase inhibitors oseltamivir or zanamavir.

Web sources: [Flu News Europe](#) | [ECDC Influenza](#) |

ECDC assessment

Influenza activity is decreasing in most of the reporting countries, but with a remaining high level of influenza virus positive samples (37%).

Actions

ECDC and WHO produce the [Flu News Europe](#) bulletin weekly.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 2 April 2015

Epidemiological summary

Worldwide in 2015, 21 wild poliovirus type 1 (WPV1) cases have been reported to WHO, compared with 51 for the same period in 2014. Since the beginning of the year, two countries have reported cases: Pakistan (20 cases) and Afghanistan (1 case).

No circulating vaccine-derived poliovirus (cVDPV) cases were reported so far in 2015. In 2014, 54 cVDPV cases were reported worldwide.

Web sources: [Polio Eradication: weekly update](#) | [MedISys Poliomyelitis](#) | [ECDC Poliomyelitis factsheet](#) | [Temporary Recommendations to Reduce International Spread of Poliovirus](#) | [Statement on the 4th IHR Emergency Committee meeting regarding the international spread of wild 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 wild poliovirus in several countries and the documented exportation of wild poliovirus to other countries support the fact that there is a potential risk for 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.

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

Opening date: 24 September 2012

Latest update: 1 April 2015

Epidemiological summary

Since April 2012 and as of 2 April 2015, 1 118 cases of MERS-CoV have been reported by local health authorities worldwide, including 458 deaths.

The distribution is as follows:

Confirmed cases and deaths by region:

Middle East

Saudi Arabia: 973 cases/422deaths

United Arab Emirates: 74 cases/10 deaths

Qatar: 11 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: 3 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 to primary cases have not been identified. The majority of MERS-CoV cases are secondary cases and many result from nosocomial transmission. Dromedary camels are a host species for the virus. There is 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 reduced further 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

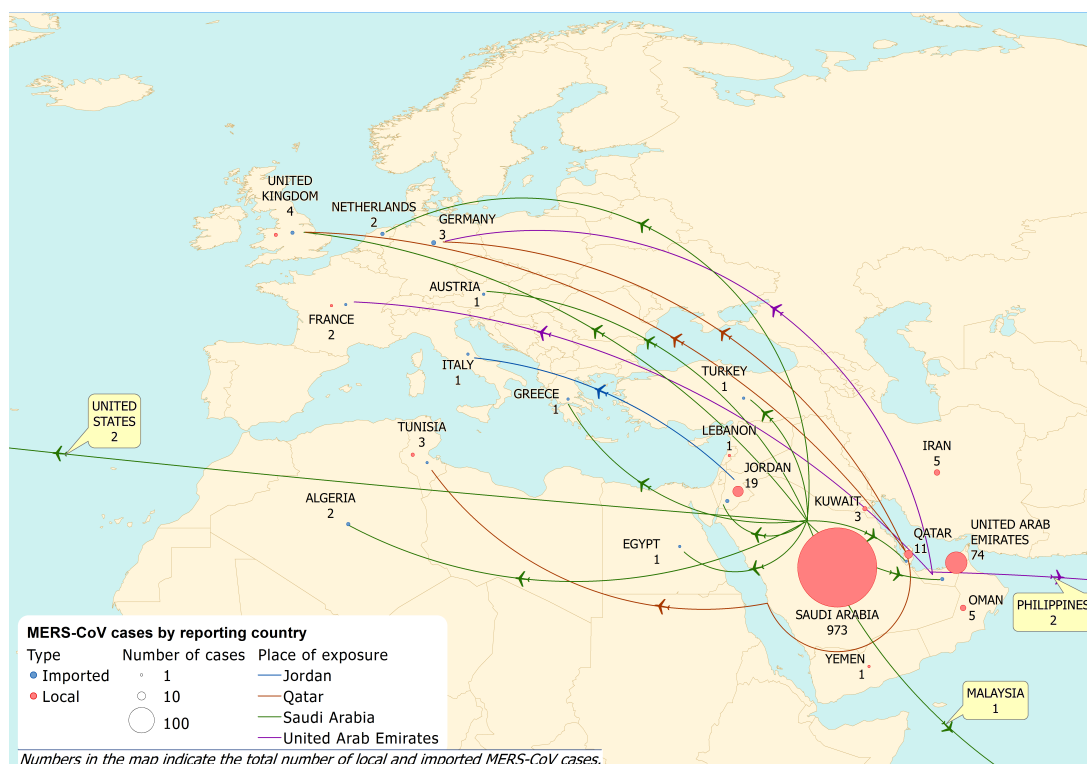
The last [rapid risk assessment](#) was updated on 9 March 2015.

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.

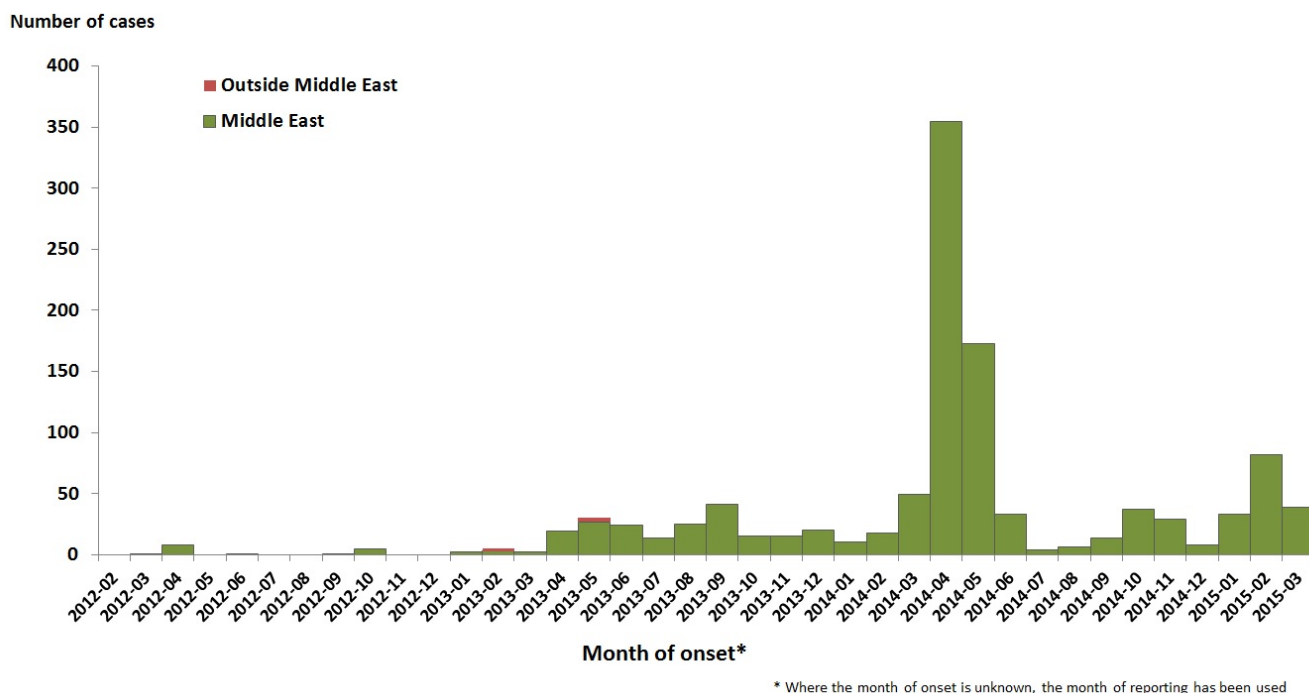
Geographical distribution of confirmed MERS-CoV cases and place of probable infection, worldwide, as of 2 April 2015 (n=1 118)

Source: ECDC



Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 31 March 2015 (n=1 118)

Source: ECDC



Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014

Latest update: 2 April 2015

Epidemiological summary

Distribution of cases as of 29 March 2015:

Countries with intense transmission

- Guinea: 3 492 cases and 2 314 deaths
- Liberia: 9 712 cases and 4 332 deaths
- Sierra Leone: 11 974 cases and 3 799 deaths

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

- Mali, Nigeria, Senegal, Spain, the United States and United Kingdom have been declared free of EVD after having cases related to the current epidemic in West Africa.

Situation in specific West African countries

In **Guinea**, WHO reported 57 new confirmed cases compared to 45 during the previous week. In addition to this increase in case incidence, the geographic area of transmission also expanded. Seven prefectures reported at least one confirmed case, compared to three the previous week. Transmission remains centered in the west of the country, in and around the capital Conakry (19 confirmed cases). The nearby prefectures of Boffa (2 cases), Coyah (8 cases), Dubreka (3 cases), and Forecariah (20 cases) also reported cases. Two additional prefectures, Fria and Siguiri, reported cases for the first time in over 50 days.

In **Sierra Leone**, 25 new confirmed cases were reported during the past week, compared with 33 the previous week. This is the fourth consecutive weekly decrease and the lowest weekly incidence since June 2014. Cases were reported from five northern and western districts around and including the capital Freetown, which reported 10 new confirmed cases. The neighbouring districts of Bombali (1 case), Kambia (5 cases), Port Loko (6 cases) and Western Rural (3 cases) also reported cases.

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In **Liberia**, no new confirmed cases were reported, the recent confirmed case died on 27 March. A total of 185 contacts associated with the case are currently being monitored. Heightened vigilance is being maintained throughout the country.

Situation among healthcare workers

The number of healthcare worker infections reported by WHO in the three most-affected countries since the start of the outbreak is 861, with 495 deaths.

Medical evacuations and repatriations from EVD-affected countries

Since the beginning of the epidemic and as of 2 April 2015, 65 individuals have been evacuated or repatriated worldwide from the EVD-affected countries. As of 20 March 2015, there have been 13 medical evacuations of confirmed EVD-infected patients to Europe (three to Germany, two to Spain, two to France, two to the UK, one to Norway, one to Italy, one to the Netherlands and one to Switzerland). Twenty-five asymptomatic persons have been repatriated to Europe as a result of exposure to Ebola (13 to United Kingdom, three to Sweden, four to Denmark, two to the Netherlands, one to Germany, one to Spain and one to Switzerland). Twenty-seven persons have been evacuated to the United States.

No new medical evacuations have taken place since the last update.

Images

- *Epicurve 3 and 4*: these epicurves show only the confirmed cases.
- *Map*: this map is based on the country situation reports and shows only confirmed cases of EVD in the past six weeks. The scale of the bar graphs is reduced to 50 cases.

Web sources: [ECDC Ebola page](#) | [ECDC Ebola and Marburg fact sheet](#) | [WHO situation summary](#) | [WHO Roadmap](#) | [WHO Ebola Factsheet](#) | [CDC](#)

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 remain 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 the latest weekly situation report from WHO on 1 April, in the week leading to 29 March, the number of reported cases slightly increased in Guinea but continued to decline in Sierra Leone. In Guinea, in addition to the increase in case reporting, the geographical area of transmission also increased. However, signs exist for improved access to communities in Forecariah prefecture where community engagement has been previously challenging.

Actions

As of 2 April 2015, ECDC has deployed 56 experts coming from within and outside the EU in response to the Ebola outbreak. This includes an ECDC mobilised contingent of experts to Guinea. Furthermore, eight additional experts are already confirmed for deployment to Guinea over the next three 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. 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](#)

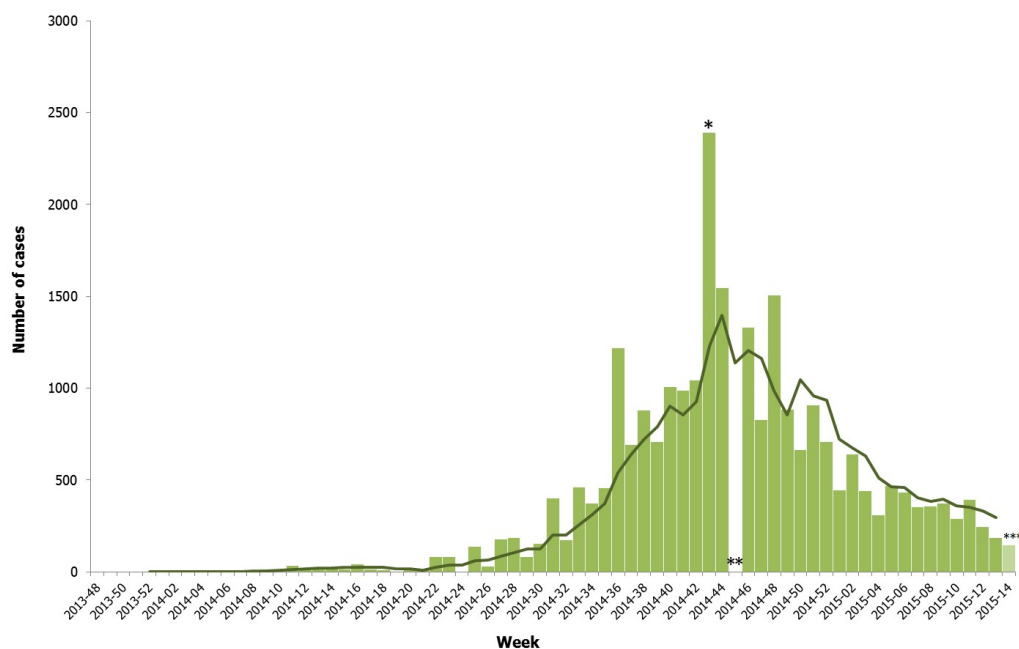
On 6 October 2014, ECDC published [risk of transmission of Ebola virus via donated blood and other substances of human origin in the EU](#)

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](#)

Distribution of EVD cases by week of reporting in Guinea, Sierra Leone, Liberia, Mali, Nigeria and Senegal, weeks 48/2013 to 14/2015

Source: Adapted from WHO figures



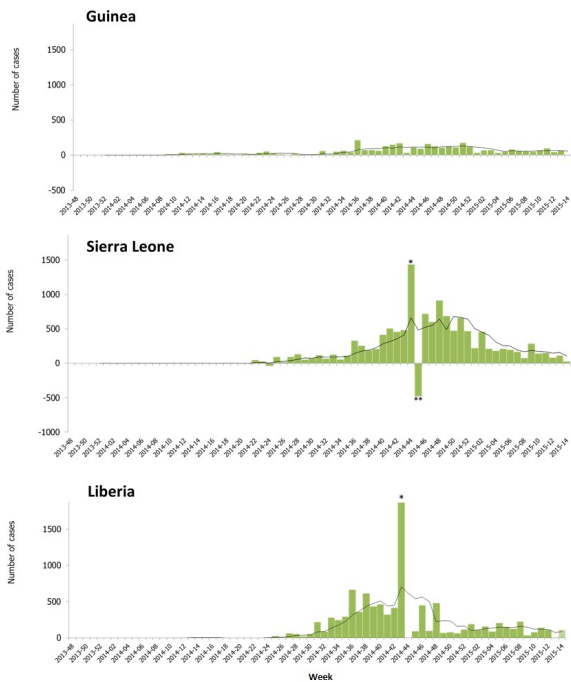
* According to WHO, the marked increase in week 43/2014 is due to a more comprehensive assessment of patient databases.

** 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.

*** Data for week 14/2015 are incomplete.

Distribution of EVD cases by week of reporting in Guinea, Sierra Leone and Liberia, weeks 48/2013 to 14/2015

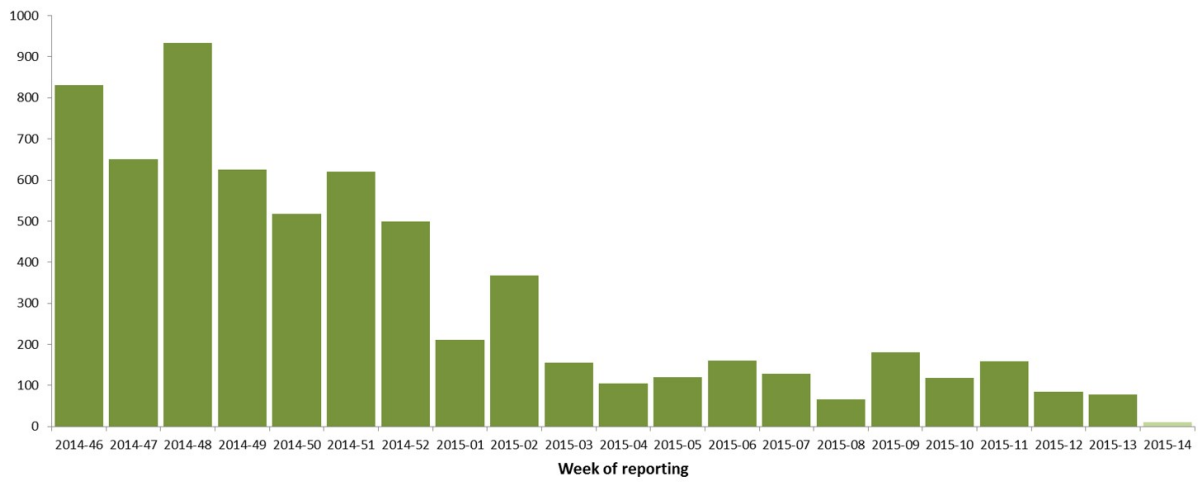
Source: Adapted from WHO figures



* According to WHO, the marked increase in the number of cases reported in Sierra Leone (week 44/2014) and in Liberia (week 43/2014) is due to a more comprehensive assessment of patient databases.
 ** In week 45/2014, WHO reported -476 cases in Sierra Leone due to retrospective corrections.

Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 46/2014 to 14/2015)

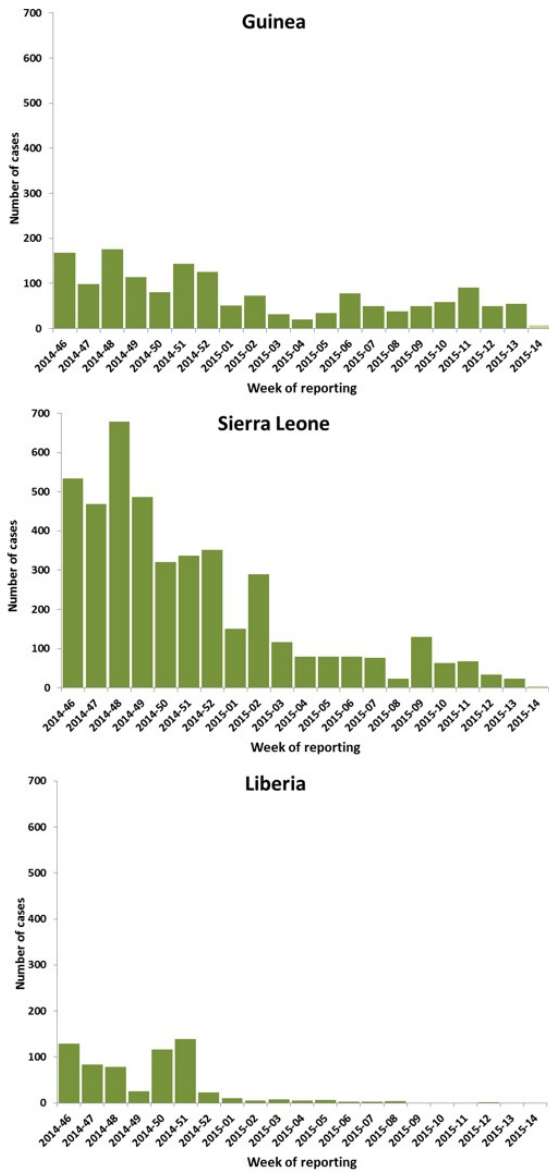
Source: Adapted from WHO figures



NB: Data for week 14/2015 are incomplete

Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 46/2014 to 14/2015)

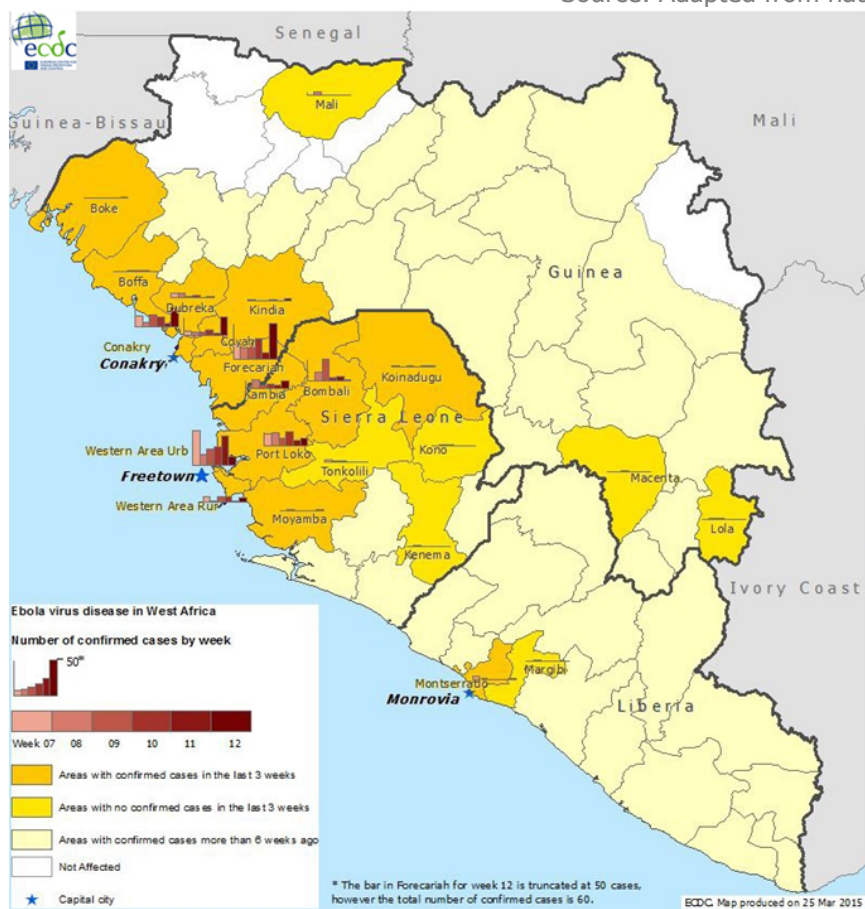
Source: Adapted from WHO figures



NB: Data for week 14/2015 are incomplete

Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (as of week 12/2015)

Source: Adapted from national situation reports



Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 1 April 2015

Epidemiological summary

Europe: No new autochthonous dengue cases have been detected so far in 2015.

Asia: As of 24 March 2015, 41 cases of dengue fever have been reported in **China** in 2015 (19 cases in January and 22 cases in February). Compared with the same time period in the past three years (2012 to 2014), the number of dengue cases in January and February in 2015 has increased. The dengue outbreak in **Malaysia** continues to grow with 33 260 dengue cases, including 101 deaths, reported so far in 2015 (as of 29 March). This is almost 10 000 cases more compared to the same period in 2014 when 23 295 cases were reported, according to media sources quoting the Ministry of Health. As of 7 March 2015, 14 672 cases of dengue fever, including 39 deaths, have been reported in the **Philippines** and since week 6, the weekly number of cases has been declining. In **Singapore**, the overall weekly number of cases has been steadily decreasing since week 9. However, 131 dengue cases were reported in the week leading to 28 March, 40 cases more than the previous week, according to the [National Environmental Agency](#).

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Caribbean: As of 15 March, a very low level of virus circulation remains in **Guadeloupe**, according to the latest bulletin published by [InVS](#). No autochthonous dengue cases have been reported on the **Cayman Islands** so far in 2015, according to [media](#) sources quoting the Ministry of Health.

Americas: Overall in the Americas, around 300 000 suspected and confirmed dengue cases have been notified so far in 2015, including 25 cases in the United States (all imported), according to the WHO [Pan American Health Organization \(PAHO\)](#). In South America, **Brazil** has reported nearly a five-fold increase in the number of dengue cases in February this year compared to the same time period last year. More than 224 000 cases have been notified during the first nine weeks of 2015. According to [media](#) sources, quoting the Ministry of Health, suggest that this recent surge in cases could be due to a drought earlier in the year and subsequent heavy rainfall during the past month.

Pacific Islands and Australia: In **Fiji**, there is an ongoing DENV-2 outbreak in Macuata Province, Northern Health Division. DENV-3 has been identified from the ongoing dengue outbreak in **Tonga**. In **French Polynesia**, the outbreak of DENV-1 continues with seven confirmed cases recorded for the week leading to 15 March, according to the Pacific Public Health Surveillance Network (PACNET).

In **Australia**, there are two ongoing DENV-1 outbreaks in Cairns (24 confirmed cases since 11 December 2014) and Tully/El Arish (38 cases since 14 January 2015), according to [Queensland Health](#).

Africa: In **Mozambique**, [media](#) sources, quoting local health authorities, report that the number of confirmed dengue cases in Nampula province has risen to 143 from 110 last week. In addition, 577 suspected cases have been identified since the beginning of 2015.

Web sources: [ECDC Dengue](#) | [Healthmap Dengue](#) | [MedISys](#) | [ProMed Americas, Asia, Pacific and Africa](#) | [WPRO update 24 March](#) |

ECDC assessment

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

Actions

ECDC 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: 1 April 2015

Epidemiological summary

As of 27 March 2015, more than 1.3 million suspected and confirmed cases of chikungunya virus infection have been reported in the Caribbean and the Americas since the beginning of the outbreak in December 2013.

In the Pacific, there are ongoing outbreaks in the Cook Islands and Kiribati. In Cook Islands, 197 cases have been reported since November 2014 (as of 15 March), according to the Pacific Public Health Surveillance Network (PACNET). As of 22 March, the weekly number of cases in American Samoa and Samoa have reduced significantly. French Polynesia has officially declared the end of the chikungunya epidemic, according to the [Health Surveillance Bureau](#).

In the [United States](#), 68 cases of chikungunya virus infection have been reported from 19 states so far this year (as of 24 March). All reported cases have occurred in travelers returning from affected areas. No locally-transmitted cases have been reported to date.

The number of imported or travel-associated chikungunya cases in England, Wales and Northern Ireland increased 12-fold from 2013 to 2014, according to new data published by [Public Health England](#). In 2013, 24 imported cases were reported compared to

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295 in 2014. The majority of these cases (88%) were acquired on trips to the Caribbean and South America.

Web sources: [PAHO update](#) | [ECDC Chikungunya](#) | [WHO Factsheet](#) | [Medisys page](#) |

ECDC assessment

Epidemiological data indicate that the outbreaks are still expanding in the Caribbean, the Americas and the Pacific. However, the outbreak in French Polynesia has been declared over. The vector is endemic in all three 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.

Actions

ECDC published an updated [Rapid Risk Assessment](#) on 27 June 2014.

ECDC monitors the global chikungunya situation on a monthly basis.

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