



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 10, 1-7 March 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 Latest update: 6 March 2015

Opening date: 9 October 2014

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

To date, eighteen countries have experienced higher than usual levels of influenza activity during this season. The number and percentage of influenza virus detections in sentinel specimens showed a slight reduction in what might be described as a high plateau phase of the influenza season. Influenza A(H1N1)pdm09, A(H3N2) and type B viruses are continuing to circulate in the Region, with A(H3N2) predominating despite increasing detections of type B viruses.

Non EU Threats

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 5 March 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 3 March 2015, WHO reported 24 018 cases of Ebola virus disease (EVD) related to the outbreak in West Africa, including 9 838 deaths.

One hundred and thirty-two new confirmed cases of EVD were reported in the week up to 1 March, which is an increase from the previous week of 99 new cases. Liberia reported no new confirmed cases during this week, which is the first time this has happened since the week of 26 May 2014. The weekly number of confirmed cases has increased in both Sierra Leone and Guinea compared with the previous week. Transmission remains widespread in Sierra Leone. In Guinea, the prefectures of Forecariah and Conakry reported a marked increase in case numbers compared with the previous week.

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

Opening date: 24 September 2012 Latest update: 5 March 2015

Since April 2012, 1 079 cases of MERS-CoV have been reported by local health authorities worldwide, including 439 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 of 26 February and as of 6 March 2015, Saudi Arabia has reported 23 additional cases of MERS-CoV in Riaydh (17 cases), Al Jawf (1), Khobar (1), Buraydah (2), Unazah (1) and Shakra (1). Four of the cases were healthcare workers. Of the 23 cases, three were classified as nosocomial infections, two are currently under investigation for possible nosocomial transmission, and one case had contact with a previously reported case in the community. One of the 23 cases reported contact to a camel. Of the 20 cases where age and sex is known 70% (n=14) were male. The mean age for the cases was 55 years ranging between 27 and 80 years.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 5 March 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 Region of Madeira, Portugal, in October 2012 and the autochthonous dengue cases in the 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.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 5 March 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 were extended for a further three months.

→Update of the week

During the past week, four new wild poliovirus type 1 (WPV1) cases were reported by WHO in Pakistan.

The fourth meeting of the IHR Emergency Committee (EC) on the international spread of wild poliovirus meeting took place on 17 February 2015 via a teleconference. The 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). On 27 February, the Director General accepted the recommendations made by the Emergency Committee of the International Health Regulations concerning the international spread of wild poliovirus. WHO has posted the statement of the recommendations on their website.

Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013 Latest update: 5 March 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 the last update on 6 February 2015, WHO Pan-American Health Organization (WHO PAHO) has reported nearly 50 000 new cases of chikungunya virus infection in the Pan-American region. Since the beginning of the outbreak in December 2013, there have been 183 deaths.

II. Detailed reports

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

Opening date: 9 October 2014 Latest update: 6 March 2015

Epidemiological summary

Eighteen countries experienced higher than usual levels of influenza activity during this season.

Excess all-cause mortality among elderly people (aged 65 years and above), concomitant with increased influenza activity and the predominance of A(H3N2) viruses, has been observed since the beginning of the year in Belgium, Denmark, France, the Netherlands, Portugal, Spain, Switzerland and the United Kingdom (England, Northern Ireland, Scotland and Wales)(see the European project for monitoring excess mortality for public health action, EuroMOMO at http://www.euromomo.eu/).

Most of the A(H3N2) viruses characterised so far show antigenic differences from the virus included in the 2014–2015 northern hemisphere influenza vaccine. The observed reduced effectiveness of the A(H3N2) component of the vaccine might have contributed to the excess mortality reported among elderly people. The A(H1N1)pdm09 and B components of the vaccine are likely to be effective.

The circulation of respiratory syncytial virus (RSV) has decreased to low levels across the European region.

Web sources: Flu News Europe | ECDC Influenza |

ECDC assessment

Influenza activity continues to increase in eastern and central countries of the WHO European Region, but is decreasing in countries of the western part.

Actions

ECDC and WHO produce the Flu News Europe bulletin weekly.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

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

Epidemiological summary

Distribution of cases as of 3 March 2015:

Countries with intense transmission:

Distribution of EVD cases for countries with intense transmission:

- Guinea: 3 237 cases and 2 141 deaths (as of 3 March 2015)
- Liberia: 9 249 cases and 4 117 deaths (as of 1 March 2015)
- Sierra Leone: 11 497 cases and 3 565 deaths (as of 3 March 2015)

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

In Guinea, WHO reported 51 new confirmed cases in the week leading up to 1 March 2015, compared with 35 cases the previous

week. Cases and deaths continue to arise from unknown transmission chains with only 49% of cases arising from registered contacts. Unsafe burials continue to occur, with 16 reports of unsafe burials during the week to 1 March. Seven prefectures reported new cases, with the largest number of new confirmed cases reported from Conakry, Coyah and Forecariah. After four weeks without new cases, Macenta reported two new confirmed cases. At least one security incident was reported in 4 of 34 prefectures.

In Sierra Leone, WHO reported 81 new confirmed cases from eight districts in the week leading up to 1 March 2015. A previously reported cluster of cases in the Aberdeen fishing community of the capital, Freetown, has lead to outbreaks in other districts, notably Bombali (22 new confirmed cases). A response team continues to trace and monitor over 2 000 contacts associated with the Aberdeen cluster. There have been 26 new confirmed cases in Freetown and 16 new cases in Port Loko over the same period. Unsafe burials and community cases of EVD continue to arise.

In Liberia, WHO has reported no new confirmed cases this week. Contacts from the last known chain of transmission in the St Paul's Bridge district of Monrovia, are being monitored. In the week leading up to 1 March, no positive samples were detected from the 45 samples tested for EVD nationwide.

Situation among healthcare workers

There are 839 confirmed cases as of 1 March, including 491 deaths, among healthcare workers in the three countries with intense and widespread transmission.

Medical evacuations and repatriations from EVD-affected countries

Thirty-eight individuals have been evacuated or repatriated worldwide from the EVD-affected countries. As of 26 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). Sixteen asymptomatic persons exposed to Ebola have been repatriated to Europe (seven 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, no new medical evacuations have been reported.

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 10/2015 **

- * 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.
- § In week 10/2014, WHO reported a decrease in the cumulative cases for Liberia.

Second and third epi-curves: Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 46/2014 to 10/2015).

The prevalence of the EVD outbreak has been low in the first months of 2015 and it appears that we are reaching the tail of the epidemic. For a clearer overview of the epidemic in these late stages we are showing only the confirmed cases (Figures 2 and 3) since the adoption of the WHO situation reports in all the three countries in week 46 2014.

Fourth epi-curve: Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission, as of week 10*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.

Web sources: ECDC Ebola and Marburg fact sheet | WHO Ebola Factsheet | CDC | WHO Roadmap | Latest available situation summary

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.

According to the latest WHO report, the weekly number of confirmed cases has increased in both Sierra Leone and Guinea. Liberia reported no new confirmed EVD cases this week. 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 in Guinea with several security incidents related to the Ebola response reported.

Actions

As of 6 March 2015, ECDC has deployed 38 experts within and outside the EU in response to the Ebola outbreak. This includes an ECDC mobilised contingent of experts to Guinea. Furthermore, 18 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 Guinée 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 Guinée 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 <u>Infection prevention and control measures for Ebola virus disease. Management of healthcare workers returning from Ebola-affected areas</u>

On 4 December 2014, EFSA-ECDC published a <u>Scientific report assessing Risk related to household pets in contact with Ebola cases in humans</u>

On 29 October 2014, ECDC published a training tool on the <u>safe use of PPE</u> and <u>options for preparing for gatherings in the EU</u> On 23 October 2014, ECDC published <u>Public health management of persons having had contact with Ebola virus disease cases in the EU</u>

On 22 October 2014, ECDC published <u>Assessing and planning medical evacuation flights to Europe for patients with Ebola virus</u> disease and people exposed to Ebola virus

On 13 October 2014, ECDC published <u>Infection prevention and control measures for Ebola virus disease: Entry and exit screening measures</u>

On 6 October 2014, ECDC published <u>risk of transmission of Ebola virus via donated blood and other substances of human origin in the EU</u>

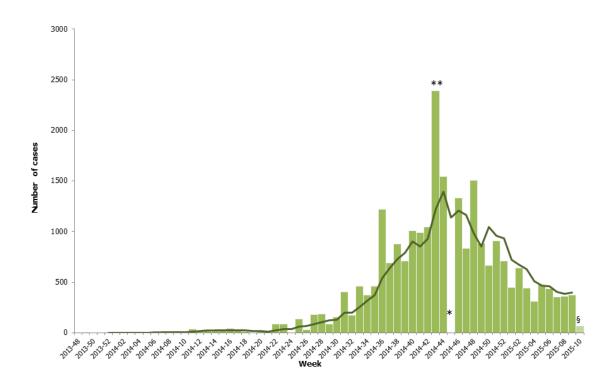
On 22 September 2014, ECDC published assessment and planning for medical evacuation by air to the EU of patients with Ebola virus disease and people exposed to Ebola virus

On 10 September 2014, ECDC published an EU case definition

Distribution of reported cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia, Mali, Nigeria and Senegal, weeks 48/2013 to 10*/2015

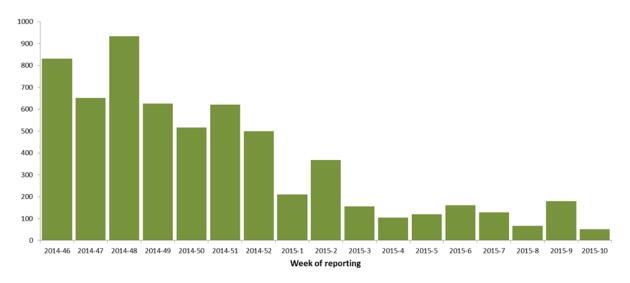
Source: Adapted from WHO figures; *data for week 10/2015 are incomplete

Weekly number of EVD cases published on 05/03/2015



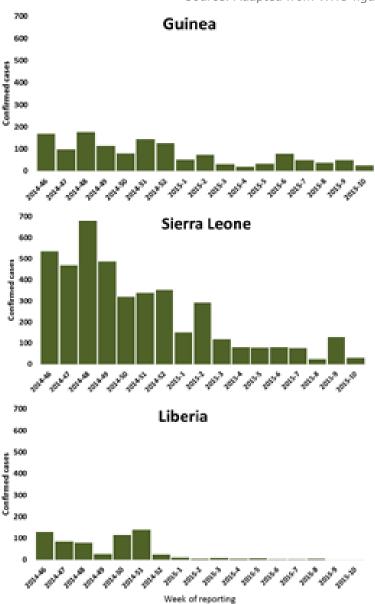
Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 46/2014 to 10/2015).

Source: Adapted from WHO figures; *data for week 10/2015 are incomplete



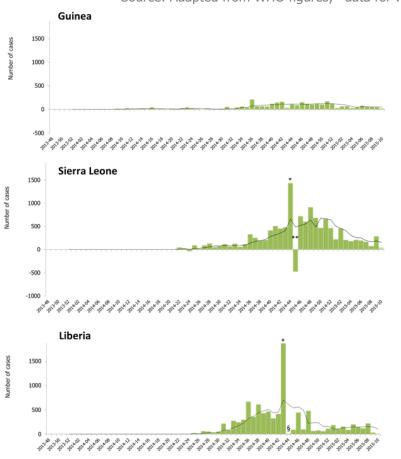
Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 46/2014 to 10/2015).

Source: Adapted from WHO figures; *data for week 10/2015 are incomplete

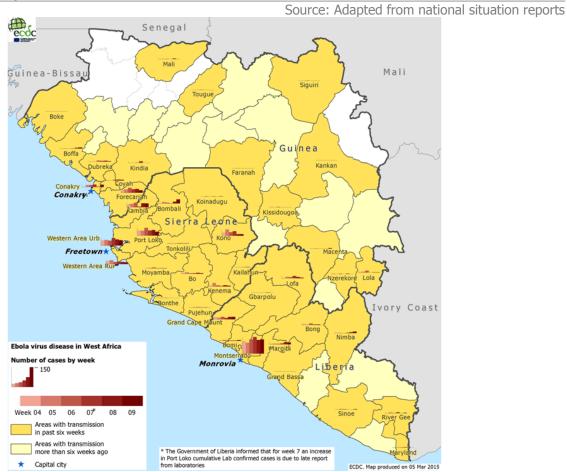


Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission, as of week 10*~2015

Source: Adapted from WHO figures; *data for week 10/2015 are incomplete



Distribution of cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (as of week 09/2015)



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

Opening date: 24 September 2012 Latest update: 5 March 2015

Epidemiological summary

Since April 2012 and as of 6 March 2015, 1 079 cases of MERS-CoV have been reported by local health authorities worldwide, including 439 deaths.

The distribution is as follows:

Confirmed cases and deaths by region:

Middle East

Saudi Arabia: 936 cases/402 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

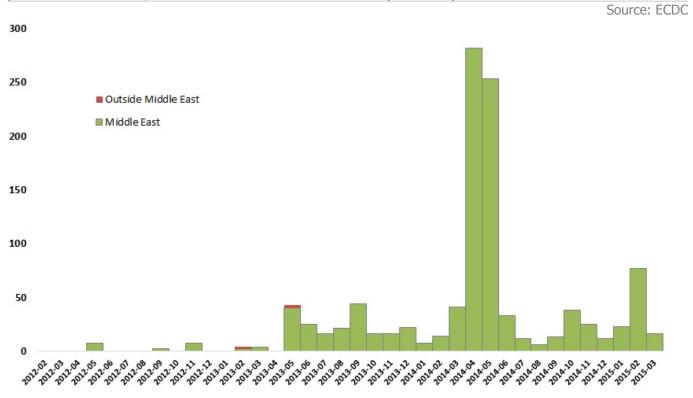
ECDC assessment

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.

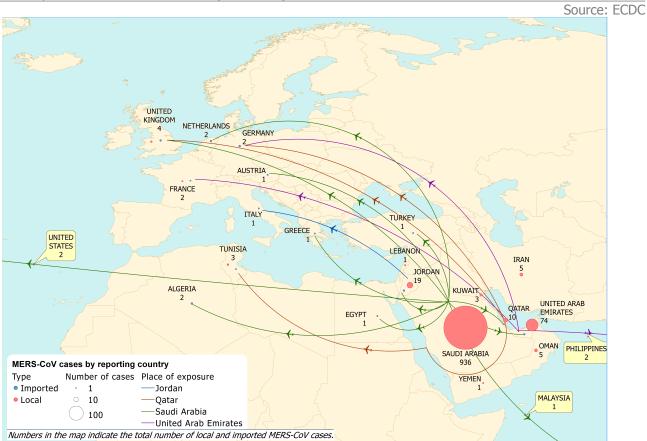
The risk of secondary transmission in the EU remains low and can be further reduced by screening for exposure among patients presenting with respiratory symptoms (and their contacts), and strict implementation of infection prevention and control measures for patients under investigation.

Actions

The last <u>rapid risk assessment</u> was updated on 23 February 2015. ECDC is closely monitoring the situation in collaboration with WHO and EU Member States. ECDC published a <u>factsheet for health professionals regarding MERS-CoV</u> on 20 August 2014. Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 - 06 March 2015 (n=1079)



Geographical distribution of confirmed MERS-CoV cases and place of probable infection, worldwide, as of 06 March 2015 (n=1079)



Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 5 March 2015

Epidemiological summary

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

Asia: Dengue fever cases continue to rise in **Malaysia** with 25 000 cases and 62 deaths recorded nationwide in the past two months (as of 28 February). The majority of these cases (around 15 000) have been recorded in Selangor, according to <u>media</u> quoting the Ministry of Health. The weekly number of dengue cases has declined over the past three weeks in **Singapore**. On 24 February, <u>the Ministry of Health and National Environmental Agency</u> notified the death of a 53-year-old female Chinese national from dengue fever at the National University Hospital. This is the first dengue fatality reported in the country in 2015. **Vietnam** is reporting a surge in dengue fever cases so far in 2015, especially in the southern part of the country. During the first two months of the year, 5 200 cases and 3 deaths have been reported in 38 out of 63 cities and provinces. Of these 5 200 cases, 3 640 cases have been notified in the southern part of the country, according to <u>media</u> quoting the Ministry of Health.

Caribbean: Cuba has issued a dengue alert following a recent increase in the foci of *Aedes aegypti* in all regions of the country, according to media quoting the latest epidemiological bulletin published by the Instituto Pedro Kouri.

Americas: In South America, **Brazil** reports high dengue activity across three states (Sao Paulo, Pernambuco and Mato Grosso) during the past month.

Pacific islands and Australia: A DENV-1 outbreak is still ongoing in **French Polynesia** but the weekly number of cases is decreasing. DENV-1 has been identified from autochthonous cases reported in **New Caledonia** during the past month, according to the Caledonia Department of Health and Social Affairs. In **Fiji**, a DENV-2 outbreak continues in Macuata province, Northern health division. As of 17 February 2015, there have been 157 confirmed cases, according to the Pacific Public Health Surveillance Network (PACNET). Circulation of DENV-3 continues in **Tonga** with 545 reported cases to date, of which 64 are confirmed cases. Four imported dengue cases were identified in New Zealand in returning travellers from Tonga for the week ending 8 February 2015, according to PACNET.

In **Australia**, there are two ongoing DENV-1 outbreaks in Cairns (13 confirmed cases since 13 December 2014) and Tully/El Arish (33 cases since 14 January 2015), according to <u>Oueensland Health</u>.

Web sources: ECDC Dengue | Healthmap Dengue | MedISys | ProMed Americas, Asia, Pacific |

ECDC assessment

The autochthonous transmission of dengue fever in the 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 <u>report</u> on the climatic suitability for dengue transmission in continental Europe and <u>guidance for the surveillance of invasive mosquitoes</u>.

ECDC monitors the dengue situation worldwide on a monthly basis.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 5 March 2015

Epidemiological summary

Worldwide in 2015, 14 WPV1 cases have been reported to WHO, compared with 28 for the same period in 2014. In 2014, nine countries reported cases: Pakistan (306 cases), Afghanistan (28 cases), Nigeria (six cases), Equatorial Guinea (five cases), Somalia (five cases), Cameroon (five cases), Iraq (two cases), Syria (one case), and Ethiopia (one 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 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? |

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 <u>risk assessment</u>. ECDC has also prepared a background document with travel recommendations for the EU.

Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013 Latest update: 5 March 2015

Epidemiological summary

As of 27 February 2015, nearly 1.25 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 American Samoa, Cook Islands, Kiribati, French Polynesia, New Caledonia and Samoa, according to the Pacific Public Health Surveillance Network (PACNET). In French Polynesia, the recent trend has been declining, according to the <u>Health Surveillance Bureau</u>.

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

ECDC assessment

Epidemiological data indicate that the outbreaks are still expanding both in the Caribbean, the Americas and the Pacific. The vector is endemic in both regions, where it also transmits dengue virus. Further spread of the outbreaks is to be expected. Continued vigilance is needed to detect imported cases of chikungunya in tourists returning to the EU from these regions. This requires awareness among clinicians, travel clinics and blood safety authorities.

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.