

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: 18 June 2015

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. During the June-to-November transmission season, ECDC monitors the situation in EU Member States and neighbouring countries in order to inform blood safety authorities of WNF-affected areas and identify significant changes in the epidemiology of the disease.

→ Update of the week

No human cases of West Nile fever were detected in EU Member States or neighbouring countries this week.

Non EU Threats

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

Opening date: 24 September 2012

Latest update: 12 June 2015

Since April 2012 and as of 19 June 2015, 1 355 cases of MERS-CoV have been reported by local health authorities worldwide, including 521 deaths. The source of the virus remains unknown but the pattern of transmission and virological studies point towards dromedary camels in the Middle East being a reservoir from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission is amplified among household contacts and in healthcare settings.

An outbreak of MERS-CoV has been ongoing in South Korea since May 2015. All cases are linked to the same transmission chain originating from a case imported from the Middle East.

→Update of the week

Since 11 June, Saudi Arabia has reported seven additional cases and seven deaths in previously reported cases. One of the seven cases is a healthcare worker.

On 16 June, the United Arab Emirates reported one new case.

A 65-year-old German case, who had travelled to the United Arab Emirates earlier this year and was diagnosed with MERS-CoV infection in March died in Germany on 6 June due to a lung disease.

On 18 June 2015, Thailand's health ministry confirmed that a person from the Middle East seeking treatment at a Bangkok hospital for heart disease had tested positive for MERS-CoV. This is the first MERS-CoV case reported in Thailand.

South Korea reported 166 cases including 24 deaths as of 19 June 2015. One of the cases reported by South Korea travelled to China where he was diagnosed and hospitalised.

On 16 June 2015, WHO convened the ninth meeting of the IHR Emergency Committee regarding MERS-CoV with regards to the current outbreak in South Korea. The Committee noted the assessment of the joint mission carried out by WHO and the Ministry of Health of South Korea regarding main factors contributing to the spread of MERS-CoV. These were:

- lack of awareness among healthcare workers and the general public about MERS;
- suboptimal infection prevention and control measures in hospitals;
- close and prolonged contact of infected MERS patients in crowded emergency rooms and multi-bed rooms in hospitals;
- the practice of seeking care at multiple hospitals ('doctor shopping');
- the custom of many visitors or family members staying with infected patients in the hospital rooms facilitating secondary spread of infections among contacts.

The Committee noted that available evidence on genetic sequencing did not identify any significant changes in the viruses obtained from cases in South Korea compared with viruses from the Middle East. Ongoing monitoring of potential genetic changes in these viruses is important. In this outbreak, transmission of MERS-CoV has been strongly associated with healthcare settings. The Committee concluded that the conditions for a Public Health Emergency of International Concern have not been met.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014

Latest update: 11 June 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). On 9 May, Liberia was declared free of Ebola virus disease. Transmission is still ongoing in Sierra Leone and Guinea.

→Update of the week

On 17 June 2015, [WHO](#) reported 27 341 cases of Ebola virus disease related to the outbreak in West Africa, including 11 184 deaths.

According to WHO's latest situation report, during the 21 days up to 14 June 2015, 76 new EVD cases occurred in Guinea and Sierra Leone. Sixty-nine cases (91%) have come from three prefectures in Guinea (Boke, Dubreka and Forecariah) and two districts in Sierra Leone (Kambia and Port Loko).

Nineteen of those cases arose from unknown sources of infection, and/or are associated with a large number of high-risk contacts, some of whom it was not possible to trace. A package of enhanced surveillance and response measures has been introduced in both Guinea and Sierra Leone.

Influenza A(H5N1) and other strains of avian flu - Multistate (world) - Monitoring globally

Opening date: 15 June 2005

Latest update: 12 June 2015

The influenza A(H5N1) virus, commonly known as bird flu, is fatal in about 60% of human infections. Sporadic cases continue to be reported, usually after contact with sick or dead poultry from certain Asian and African countries. No human cases have been reported from Europe.

→Update of the week

Since last week, there has been no new update from WHO regarding A(H5N1) and other strains of avian influenza in humans.

On 18 June 2015, Egypt notified of a new case of A(H5N1) in a 3-year-old female with a history of exposure to poultry who had symptom onset on 8 June and was admitted to hospital on 10 June with bilateral pneumonia. Confirmation was done by RT-PCR at Central Public Health Laboratories on 16 June. The patient is under treatment with Tamiflu.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 12 June 2015

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until all transmission of the virus 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 the international spread of wild poliovirus during 2014. On 6 May 2015, the Temporary Recommendations in relation to PHEIC were extended for another three months.

→Update of the week

In the past week, one new case of poliovirus type 1 (WPV1) was reported in Pakistan.

II. Detailed reports

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

Opening date: 2 June 2015

Latest update: 18 June 2015

Epidemiological summary

As of 17 June 2015, no human cases of West Nile fever have been reported in the EU or 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](#) |

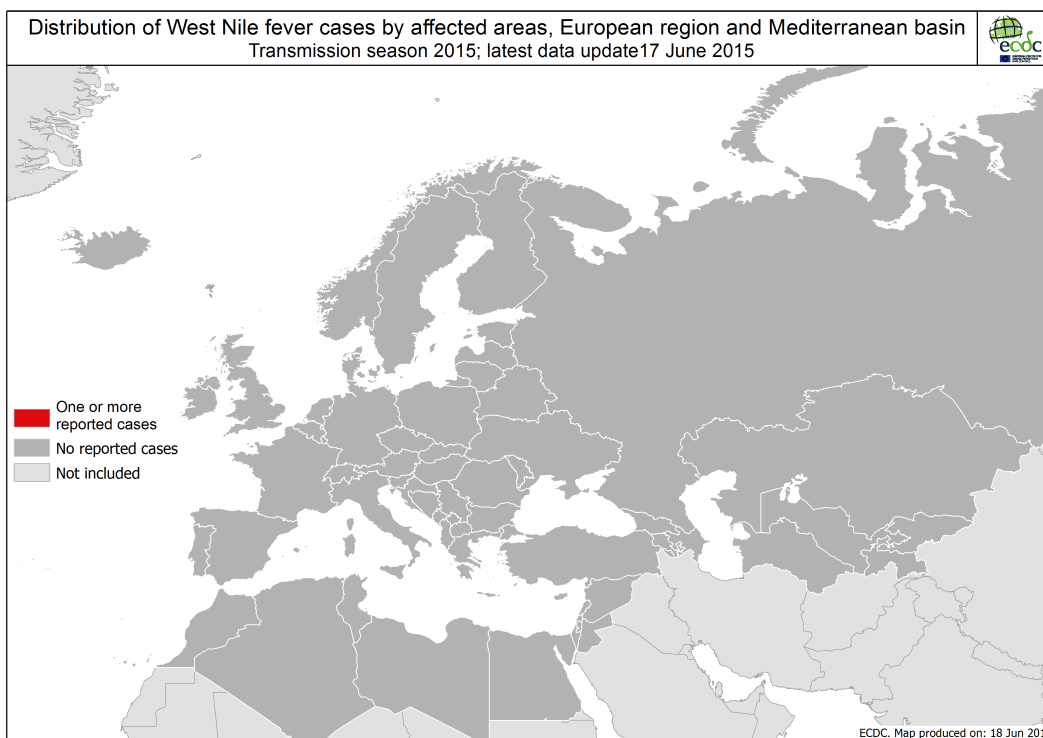
ECDC assessment

West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures is considered important for ensuring blood safety by the national health authorities when human cases of West Nile 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 by individual NAT.

Actions

From week 23 onwards, ECDC will produce weekly West Nile fever (WNF) risk maps during the transmission season (June-November) to inform blood safety authorities regarding WNF affected areas.

Source: ECDC



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

Opening date: 24 September 2012

Latest update: 12 June 2015

Epidemiological summary

Since April 2012 and as of 19 June 2015, 1 355 cases of MERS-CoV have been reported by local health authorities worldwide,

4/15

including 521 deaths.

The distribution is as follows:

Confirmed cases and deaths by region:

Middle East

Saudi Arabia: 1 035 cases/458 deaths

United Arab Emirates: 78 cases/10 deaths

Qatar: 13 cases/5 deaths

Jordan: 19 cases/6 deaths

Oman: 6 cases/3 deaths

Kuwait: 3 cases/1 death

Egypt: 1 case/0 deaths

Yemen: 1 case/1 death

Lebanon: 1 case/0 deaths

Iran: 6 cases/2 deaths

Europe

Turkey: 1 case/1 death

UK: 4 cases/3 deaths

Germany: 3 cases/2 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

South Korea: 165 cases/24 deaths

China: 1 case/0 deaths

Thailand: 1 case/ 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

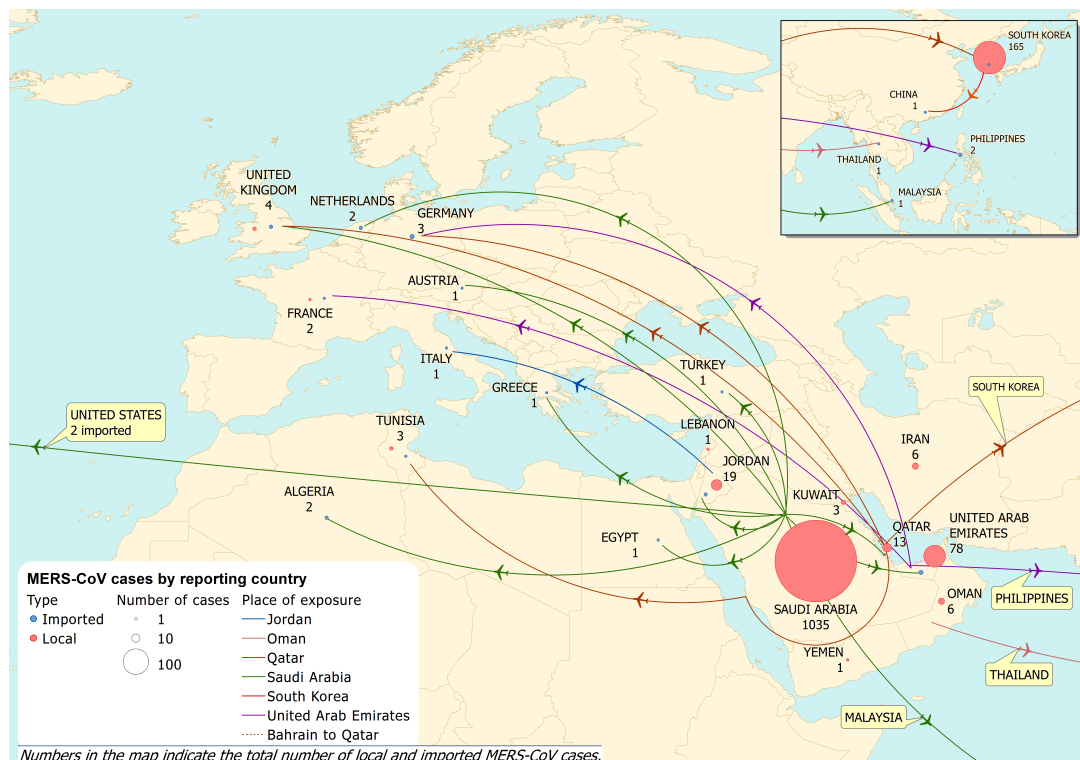
ECDC's assessment continues to be that the MERS-CoV outbreak poses a low risk to the EU. Because of the continued risk of case importation to Europe after exposure in the Middle East and South Korea, international surveillance for MERS-CoV cases among travellers remains essential. Moreover, rapid efforts 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 now documented in South Korea. Many of the cases detected in the Middle East continue to be caused by nosocomial exposure.

Actions

ECDC published a [rapid risk assessment](#) on 11 June 2015.

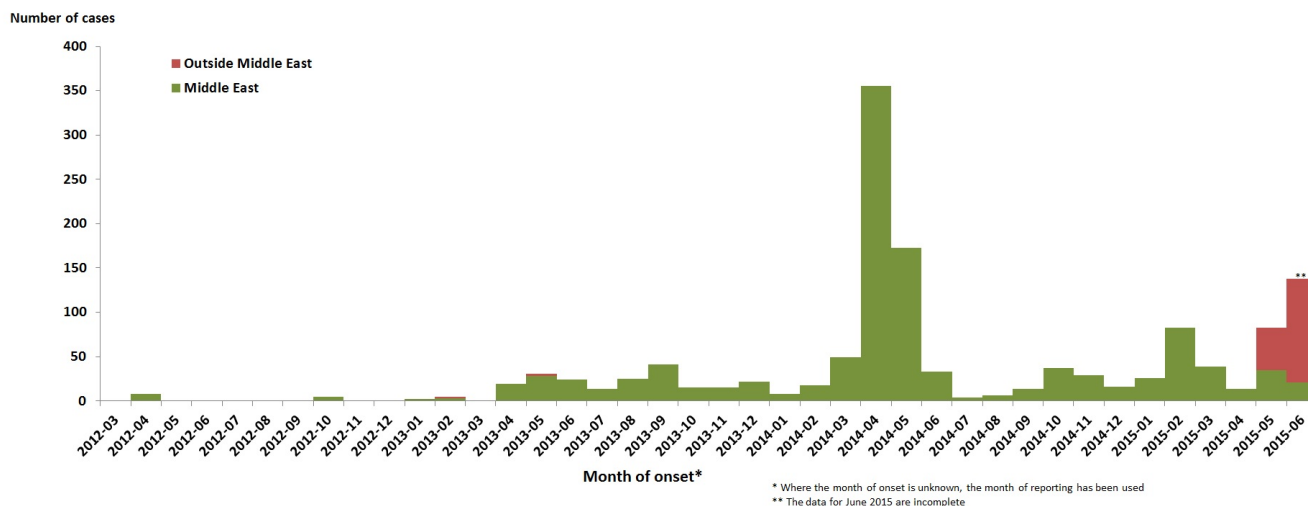
Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 19 June 2015 (n=1 355)

Source: ECDC



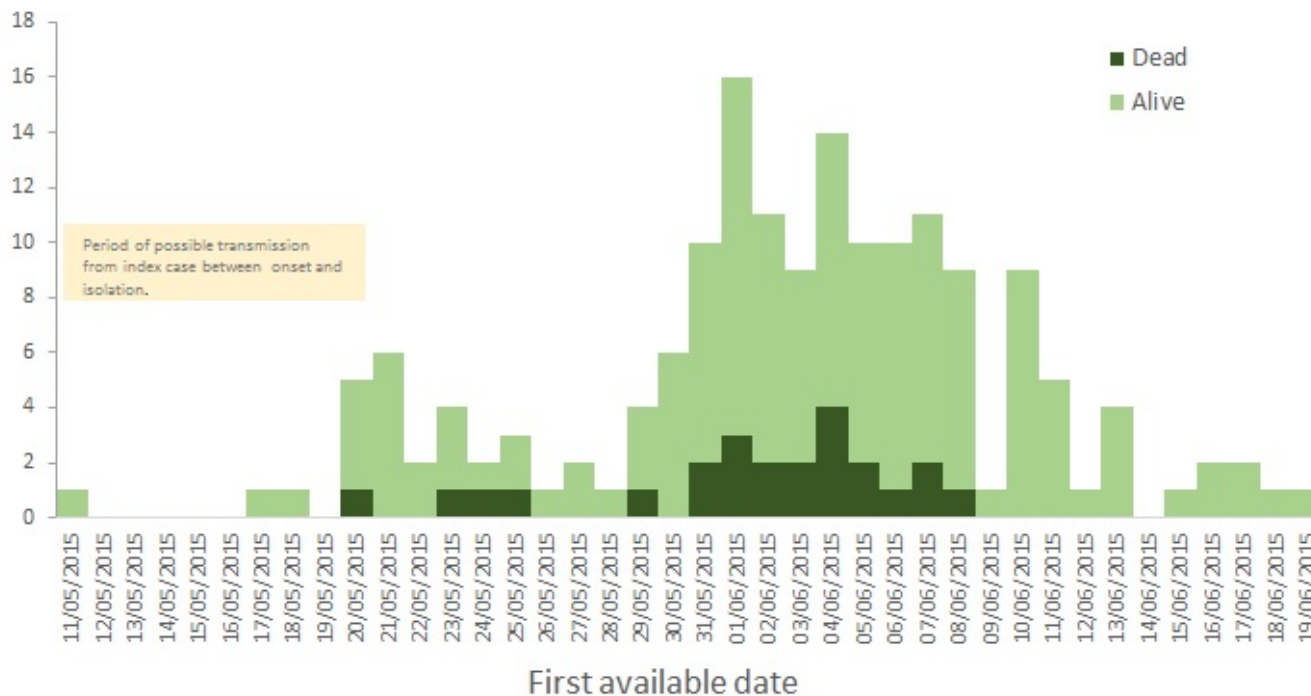
Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 19 June 2015 (n=1 355)

Source: ECDC



Distribution of confirmed cases of MERS-CoV by first available date and status regarding the outbreak in South Korea from 11 May - 19 June 2015

Source: ECDC



Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014

Latest update: 11 June 2015

Epidemiological summary

Distribution of cases as of 14 June 2015:

Countries with intense transmission:

- **Guinea:** 3 674 cases of which 3 245 are confirmed and 2 444 deaths.
- **Sierra Leone:** 12 965 cases of which 8 649 are confirmed and 3 919 deaths.

Countries with previously widespread and intense transmission:

- **Liberia:** declared Ebola-free on 9 May 2015

Countries that have reported an initial case or localised transmission:

- Nigeria, Senegal, the USA, Spain, Mali, the UK and Italy (one confirmed case declared Ebola free on 10 June 2015).

Situation in West African countries

In **Guinea**, WHO reported 10 new confirmed cases in the week up to 14 June, compared with 16 cases during the previous week. Cases have been reported in Dubreka (four), Forecariah (three), Boke (two) and Conakry (one). A case was reported, for the first time, from Boke Centre. Of those 10 cases, five were registered contacts. Of the remaining five cases, four arose from an unknown source of infection and one was confirmed after post-mortem testing of a community death. WHO reported 15 unsafe

burials in the week up to 14 June, representing 4% of 357 community deaths.

Health checkpoints have been established in the western prefectures of Boke and Coyah. A 6-day door-to-door case-finding and sensitisation campaign was carried out in Dubreka from 7 June. Intensive investigations are underway to trace a number of high-risk contacts associated with three cases reported from the Guinean capital, Conakry, over the past two weeks. All of the three cases acquired infection outside the capital.

In **Sierra Leone**, WHO reported 14 new confirmed cases in the week up to 14 June, compared with 15 cases during the previous week. Cases have been reported from Port Loko (eight) and Kambia (six). A case reported from the area of Port Loko acquired infection after being treated in the same private healthcare facility as another confirmed case. There is an extremely high likelihood that this case will lead to further transmission, with 20 healthcare workers who came into direct or indirect contact with the case defined as medium- or high-risk contacts, along with many patients who were treated at the same facility. A large-scale operation is planned in the districts of Kambia and Port Loko, aimed at ending the secret movement of cases, contacts, and dead bodies that has propagated transmission over the past two months. Measures include broadened criteria for identifying and tracing contacts, improved incentives to increase compliance with quarantine measures and encourage the timely reporting and isolation of cases, and expanded use of rapid diagnostic tests.

Situation among healthcare workers

According to WHO, the last healthcare worker infected in Guinea was reported on 6 April, and 14 May in Sierra Leone. Overall, 869 cases and 507 deaths have been recorded among healthcare workers in Guinea (187 cases and 94 deaths), Sierra Leone (304 cases and 221 deaths) and Liberia (378 cases and 192 deaths). Outside of the three most affected countries, 2 Ebola-infected healthcare workers were reported in Mali, 11 in Nigeria, 1 in Spain (infected while caring for an evacuated EVD patient), 2 in the UK (both infected in Sierra Leone), 6 in the USA (2 infected in Sierra Leone, 2 in Liberia, and 2 infected while caring for a confirmed case in Texas) and 1 in Italy (infected in Sierra Leone).

Medical evacuations and repatriations from EVD-affected countries

Since the beginning of the epidemic and as of 19 June 2015, 65 individuals have been evacuated or repatriated worldwide from the EVD-affected countries. Of these, 38 individuals have been evacuated or repatriated to Europe. Thirteen were medical evacuations of confirmed EVD-infected patients to: Germany (3), Spain (2), France (2), UK (2), Norway (1), Italy (1), Netherlands (1) and Switzerland (1). Twenty-five asymptomatic persons have been repatriated to Europe as a result of exposure to Ebola in West Africa: UK (13), Denmark (4), Sweden (3), Netherlands (2), Germany (1), Spain (1) and Switzerland (1). Twenty-seven persons have been evacuated to the United States. No new medical evacuations have taken place since 18 March 2015.

Other news

Liberia launched a five-year study to better understand long-term health consequences of EVD in Ebola survivors, determine if survivors develop immunity that will protect them from future Ebola infection and assess whether previously EVD-infected individuals can transmit infection to close contacts and sexual partners. The researchers expect to enrol 1 500 survivors and 6 000 of their partners and family.

Images

- Epicurve 1: the epicurve shows the confirmed cases in the three most affected countries.
- Epicurve 2: the epicurve shows the confirmed cases in Guinea and Sierra Leone.
- Map: this map is based on country situation reports and shows only confirmed cases of EVD in the past six weeks.

Web sources: ECDC Ebola page | ECDC Ebola and Marburg fact sheet | WHO situation summary | WHO Roadmap | WHO Ebola Factsheet | CDC | Study in Liberia

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 WHO, decline in case incidence and the contraction of the geographic area affected by Ebola has stalled during the last weeks. Both in Guinea and Sierra Leone new confirmed cases are still identified among unregistered contacts and people continue to be diagnosed with Ebola post mortem. These patterns indicate that the disease is circulating in unrecognised chains of transmission. In order to achieve zero cases, there is a need for stronger community engagement, improved contact tracing

and earlier case identification.

Actions

As of 12 June 2015, ECDC has deployed 78 experts from within and outside the EU in response to the Ebola outbreak. This includes an ECDC-mobilised contingent of experts to Guinea. Furthermore, additional experts are already confirmed for deployment to Guinea over the next few months.

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

An epidemiological update is published weekly on the [EVD ECDC page](#).

The latest (11th) update of the [rapid risk assessment](#) was published on 11 May 2015.

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 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](#).

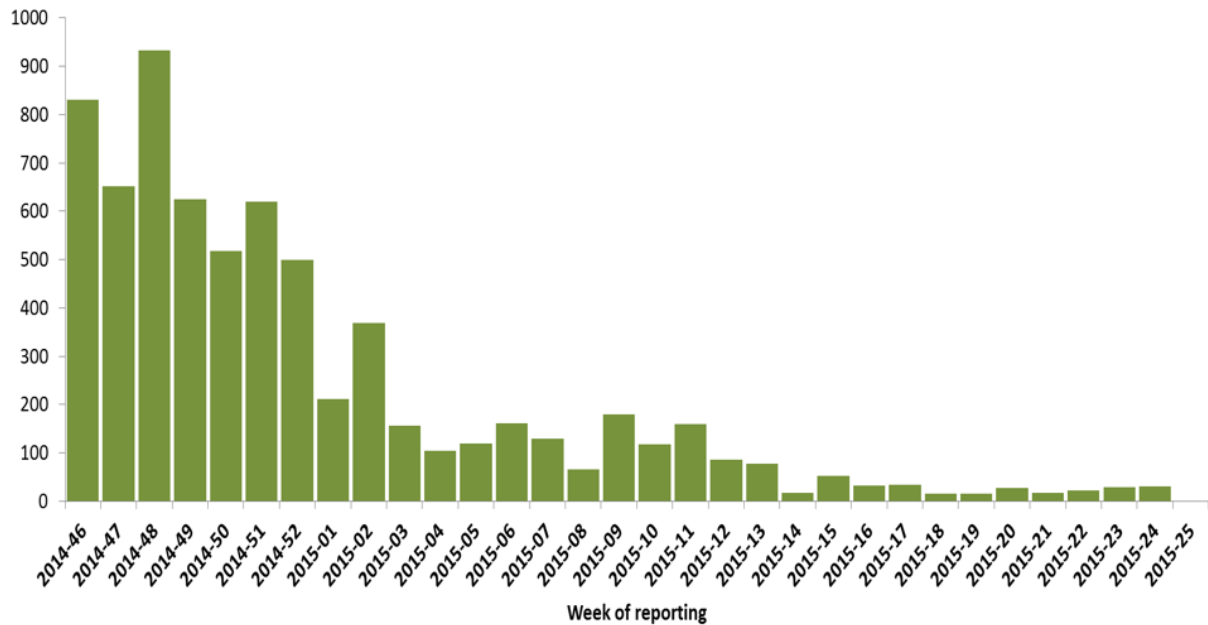
On 6 October 2014, ECDC published [risk of transmission of Ebola virus via donated blood and other substances of human origin in the EU](#).

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](#).

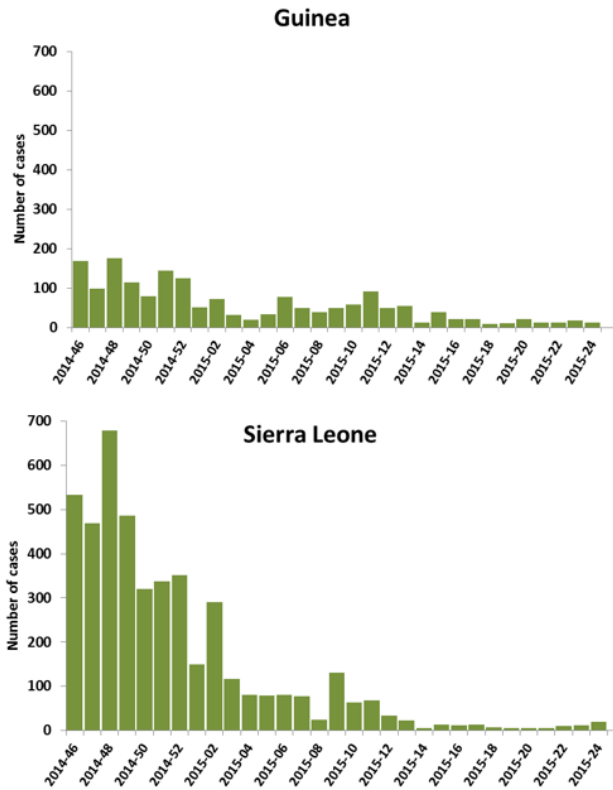
Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 46/2014 to 25/2015)

Adapted from WHO figures; *data for week 25/2015 are incomplete



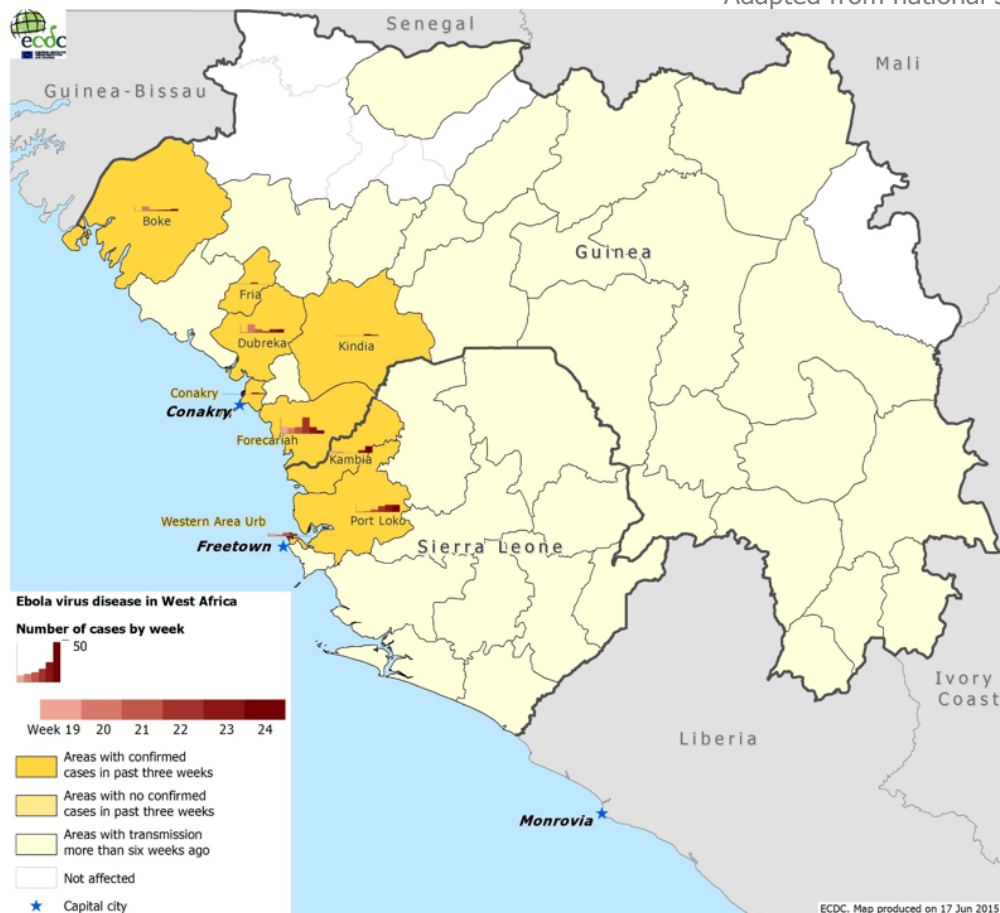
Distribution of confirmed cases of EVD by week of reporting in Guinea and Sierra Leone (weeks 46/2014 to 25/2015)

Adapted from WHO figures; *data for week 25/2015 are incomplete



Distribution of confirmed cases of EVD by week of reporting in Guinea and Sierra Leone (as of week 24/2015)

Adapted from national situation reports



Influenza A(H5N1) and other strains of avian flu - Multistate (world) - Monitoring globally

Opening date: 15 June 2005

Latest update: 12 June 2015

Epidemiological summary

Human cases of avian flu

Egypt has reported 141 human cases of influenza A(H5N1), including 39 deaths in 2015 so far. Worldwide, from 2003 to 1 May 2015, 840 laboratory-confirmed human cases of avian influenza A(H5N1) virus infection have been officially reported to WHO from 16 countries. Of these cases, 447 have died.

Non-human cases of avian flu

In the past week, there has been an outbreak of low-pathogenic avian influenza (H7N7 serotype) in Niedersachsen in Germany. OIE reported A(H5N1) in Iran and in Ghana in backyard chickens, and media reported A(H5N1) in wild birds in Russia. Three more outbreaks of highly pathogenic avian influenza of the H5N2 serotype have been confirmed in Taiwan including two goose farms and one chicken farm. Three further HPAI outbreaks were detected in poultry in Oxford County in Southern Ontario, Canada.

Web sources: [ECDC Rapid Risk Assessment](#) | [Avian influenza on ECDC website](#) | [EMPRES](#) | [OIE](#) |

ECDC assessment

Most human infections of A(H5N1) are the result of direct contact with infected birds or contaminated environments, and countries with large poultry populations in close contact with humans are considered to be most at risk of bird flu outbreaks. Therefore, additional human cases would not be unexpected. There are currently no indications of a significant change in the epidemiology associated with any clade or strain of the A(H5N1) virus from a human health perspective. However, vigilance for avian influenza in domestic poultry and wild birds in Europe remains important.

Although an increased number of animal-to-human infections have been reported by Egypt during 2015, it is not thought to be related to virus mutations but rather to more people becoming exposed to infected poultry.

Various influenza A(H5) and A(H7) subtypes, such as influenza A(H5N1), A(H5N2), A(H5N3), A(H5N6), A(H5N8) and A(H7N3), have recently been detected in birds in West Africa, Asia, Europe, and North America, according to the World Organisation of Animal Health (OIE). Although these influenza viruses might have the potential to cause disease in humans, to date, there have been no reported human infections with these viruses with the exception of human infections with influenza A(H5N1) and A(H5N6) viruses. The risk to people from these infections in wild birds, backyard flocks and commercial poultry is considered to be low.

Actions

ECDC monitors the worldwide A(H5N1) situation through epidemic intelligence activities on a weekly basis in order to identify significant changes in the epidemiology of the virus. ECDC re-assesses the potential of a changing risk for A(H5N1) to humans on a regular basis.

ECDC published a [Rapid Risk Assessment](#) covering A(H5N1) in Egypt on 13 March 2015.

ECDC published an [epidemiological update](#) about A(H5N1) in Egypt on 10 April 2015.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 12 June 2015

Epidemiological summary

Worldwide in 2015, 28 wild poliovirus type 1 (WPV1) cases have been reported to WHO so far, compared with 103 for the same period in 2014. Since the beginning of the year, two countries have reported cases: Pakistan (25 cases) and Afghanistan (3 cases).

No circulating vaccine-derived poliovirus (cVDPV) cases have been reported so far in 2015.

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 locally acquired wild-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 of wild poliovirus being re-introduced to the EU/EEA. The highest risk of large poliomyelitis outbreaks occurs in areas with clusters of unvaccinated populations and in people living in poor sanitary conditions, or a combination of both.

References: [ECDC latest RRA](#) | [Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA](#) | [Wild-type poliovirus 1 transmission in Israel - what is the risk to the EU/EEA?](#) |

Actions

ECDC monitors reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identify events that increase the risk of wild poliovirus being re-introduced into the EU. Following the declaration of polio as a PHEIC, ECDC updated its [risk assessment](#). ECDC has also prepared a background document with travel recommendations for the EU.

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