

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: 5 November 2015

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. During the June-to-November transmission season, ECDC monitors the situation in EU Member States and neighbouring countries in order to inform blood safety authorities of WNF-affected areas and identify significant changes in the epidemiology of the disease. The 2015 transmission season started later than in previous years and it is still active, but at a lower level than last year. In week 41, France reported its first human case of West Nile virus infection since 2003.

→Update of the week

During the past week, no new cases were reported in EU Member States. In neighbouring countries, Israel reported four additional cases in already affected districts: Haifa (2), Central (1), and Tel Aviv (1). Serbia reported four new cases, two cases in two already affected areas, Belgrade and South Backa district, and two cases in two newly affected areas, Macva district and Kolubara district.

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

Opening date: 2 October 2015

Latest update: 5 November 2015

Following the 2009 pandemic, influenza transmission in Europe has returned to its seasonal epidemic pattern, with peak activity during winter months. ECDC monitors influenza activity in Europe during the winter season and publishes its report weekly on the [Flu News Europe website](#). The reporting for the season 2015-2016 has started. As is usual for this time of year, the intensity of influenza activity in the European Region is still low in week 44.

→Update of the week

In week 44, influenza activity in the WHO European Region was at low levels in all the 40 countries that reported data.

Non EU Threats

New! Undiagnosed respiratory disease after unknown exposure at Konkuk animal research facility – South Korea - 2015

Opening date: 5 November 2015

Since 29 October 2015, the Korean CDC has been investigating an outbreak of respiratory illness linked to the College of Animal Bioscience and Technology building in Konkuk involving 84 cases. First date of onset of disease was 19 October 2015. So far, no cause for the outbreak has been identified despite extensive testing of cases for viral and bacteriological agents. Investigations are ongoing, including environmental sampling.

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

Opening date: 24 September 2012

Latest update: 5 November 2015

Since April 2012 and as of 5 November 2015, 1 637 cases of MERS, including 632 deaths, have been reported by local health authorities worldwide. The source of the virus remains unknown, but the pattern of transmission and virological studies point towards dromedary camels in the Middle East being a reservoir from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission is amplified among household contacts and in healthcare settings, as was clearly shown in the recent outbreak in South Korea and in Saudi Arabia.

→Update of the week

Since 27 October 2015, there have been two new cases and four deaths in previously reported cases in Saudi Arabia. The first case is a 50-year-old female from Afif city in Najd province. The second case is a 70-year-old male from Riyadh city in Riyadh region. Both cases are classified as primary cases.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014

Latest update: 5 November 2015

An epidemic of Ebola virus disease (EVD) has been ongoing in West Africa since December 2013, mainly affecting Guinea, Liberia and Sierra Leone. On 8 August 2014, WHO declared the Ebola epidemic in West Africa a Public Health Emergency of International Concern (PHEIC). As of 3 November 2015, WHO has reported 28 581 cases of Ebola virus disease related to the outbreak in West Africa, including 11 299 deaths. The number of cases in the most affected countries peaked in autumn 2014 and has been slowly decreasing since. Liberia was declared Ebola-free by WHO on 3 September 2015. Since the end of July 2015, in Guinea and Sierra Leone, the last two affected countries, case incidence has remained below 10 cases per week and EVD transmission has been geographically confined to small areas in both countries. The risk of spread, regionally and globally, remains until all the countries in West Africa are declared Ebola-free.

→Update of the week

According to [WHO](#), one confirmed case was reported from Guinea in the week leading up to 1 November. No new cases have been reported for seven consecutive weeks in Sierra Leone. If no new cases are reported, Sierra Leone will be declared Ebola free on 7 November.

Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013

Latest update: 5 November 2015

An outbreak of chikungunya virus infection started in the Caribbean in December 2013 later spreading to the Americas and Pacific region. In 2015, there remained ongoing outbreaks in these regions but at a lower level compared with the same period last year, especially in the Pacific region. So far this year, no autochthonous cases of chikungunya virus infection have been detected in Europe.

→Update of the week

Ongoing outbreaks are reported in the Caribbean, Americas, and the Pacific. Samples positive for Chikungunya virus have been reported from Africa related to a haemorrhagic fever outbreak in Sudan.

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

Opening date: 15 June 2005

Latest update: 4 November 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. From 2003 through 4 November 2015, 844 laboratory-confirmed human cases of avian influenza A (H5N1) virus infection have been officially reported to WHO from 16 countries. Of these cases, 449 have died.

→Update of the week

No new human cases of A(H5N1) reported since 17 July 2015.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 29 October 2015

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, 679 cases have been reported up until 5 November 2015, including 275 deaths. No autochthonous cases have been reported outside of China. Most cases have been unlinked, and sporadic zoonotic transmission from poultry to humans is the most likely explanation for the outbreak.

→Update of the week

No new cases have been notified since 16 October 2015.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 29 October 2015

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission of the virus has completely stopped and the world becomes polio-free. Polio was declared a Public Health Emergency of International Concern (PHEIC) on 5 May 2014 due to concerns regarding the increased circulation and international spread of wild poliovirus during 2014. On 17 August 2015, the Temporary Recommendations in relation to PHEIC were extended for another three months. WHO recently declared wild poliovirus type 2 eradicated worldwide. As of 4 November 2015, WHO has reported 51 cases of wild poliovirus compared with 277 during the same time period last year. All cases so far in 2015 have been reported from Afghanistan and Pakistan.

→Update of the week

According to WHO, no new wild poliovirus cases were reported in the past week.

One case of circulating vaccine-derived poliovirus type 1 (cVDPV1) was reported in Lao in the past week, in Borikhamxay province, with onset of paralysis on 7 October.

II. Detailed reports

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

Opening date: 2 June 2015

Latest update: 5 November 2015

Epidemiological summary

As of 5 November 2015, 106 cases of West Nile fever in humans have been reported in EU Member States and 142 cases in neighbouring countries since the beginning of the 2015 transmission season.

Web sources: [ECDC West Nile fever](#) | [ECDC West Nile fever risk assessment tool](#) | [ECDC West Nile fever maps](#) | [WHO fact sheet](#)

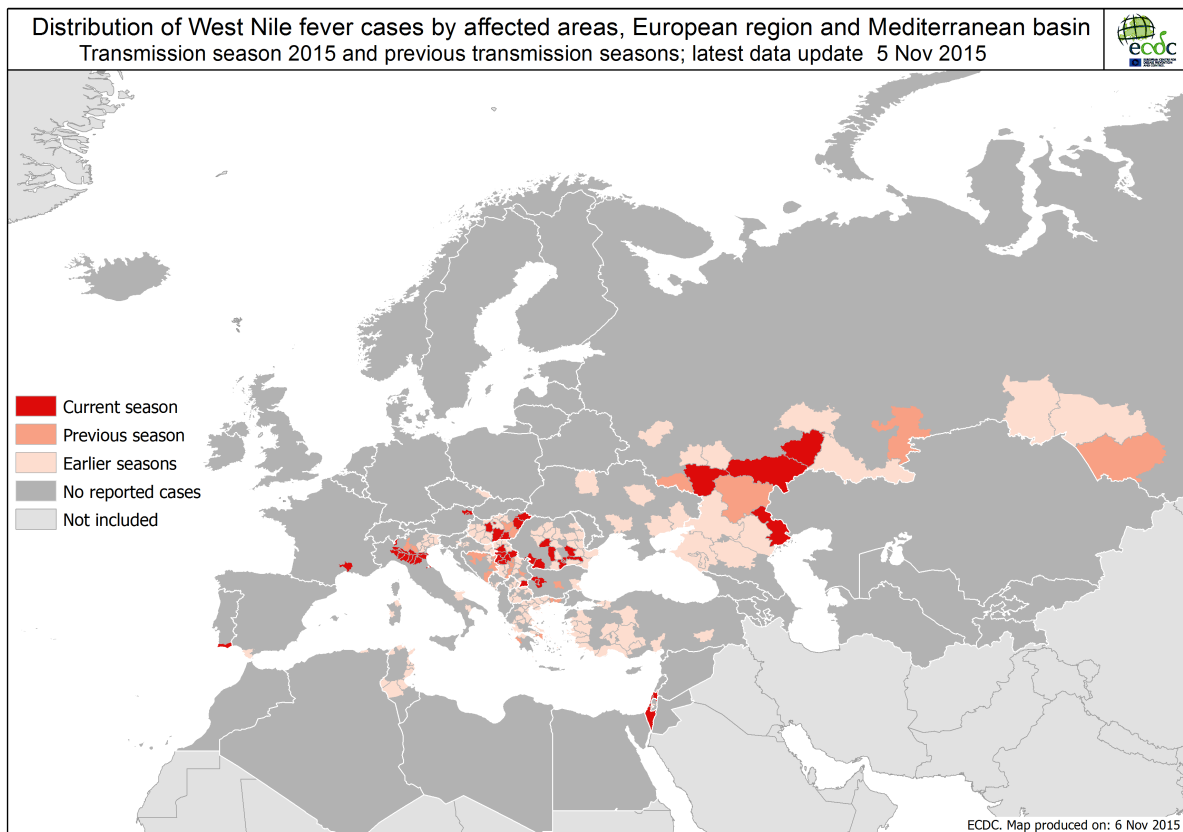
ECDC assessment

WNF in humans is a notifiable disease in the EU. The implementation of control measures is considered important by the national health authorities for ensuring blood safety when human cases of WNF fever occur. According to the [EU Blood Directive](#), efforts should be made to defer blood donations from affected areas with ongoing virus transmission, unless donations are tested using individual nucleic acid amplification testing (NAAT).

Actions

ECDC produces weekly WNF maps during the transmission season (June to November) to inform blood safety authorities of WNF-affected areas.

Source: ECDC



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

Opening date: 2 October 2015

Latest update: 5 November 2015

Epidemiological summary

Influenza activity in the WHO European Region was at low levels in all the 40 countries that reported data this week. In line with the low influenza activity across the Region, influenza viruses were detected in 55 patients, eight from sentinel influenza-like illness (ILI) sources, 46 from non-sentinel sources and one laboratory-confirmed hospitalised influenza case. All three seasonal influenza viruses (influenza A(H1N1)pdm09, A(H3N2) and influenza B) were detected.

ECDC assessment

As is usual at this time of year, influenza activity in the European Region is low, with few influenza viruses detected.

Actions

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

New! Undiagnosed respiratory disease after unknown exposure at Konkuk animal research facility – South Korea - 2015

Opening date: 5 November 2015

Epidemiological summary

Since 29 October 2015, the Korean CDC has been investigating cases of respiratory illness linked to the College of Animal Bioscience and Technology building in Konkuk. First date of onset of disease was 19 October 2015. There are 84 suspected cases reported as of 5 November 2015 of which 52 are hospitalised. At this time there is no evidence of human to human transmission and none of the cases is in serious condition. So far, all PCR tests carried out by the KCDC have been negative for 16 bacteria and viruses that commonly cause respiratory illness. Rhinovirus, identified in five of the patients was assessed as not being relevant for this outbreak. The college building has been closed and disinfected. Epidemiological and environmental investigations are ongoing. A case control study is planned to be conducted.

ECDC assessment

So far, no deaths have been reported among these 52 hospitalised pneumonia cases in South Korea. No clear indication of secondary transmission has been reported among the monitored contacts. A pneumonia outbreak of this magnitude associated with one place is unexpected and more information would be needed to further refine the assessment. In particular, on whether the incriminated building was hosting animals and whether experiments on infectious diseases were being carried out in the building. It is unclear from available reports whether localised exposure to bacterial or fungal toxins and radiation have been ruled out.

There are no indications of risks to EU citizens in South Korea or in Europe, and similar incidents have not been reported from animal research facilities in Europe.

Actions

ECDC is monitoring this event through epidemic intelligence.

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

Opening date: 24 September 2012

Latest update: 5 November 2015

Epidemiological summary

As of 5 November, 1 637 cases of MERS, including 632 deaths, have been reported by local health authorities worldwide.

Publication: Risk Factors for Primary Middle East Respiratory Syndrome Coronavirus Illness in Humans, Saudi Arabia, 2014 Abstract

Risk factors for primary Middle East respiratory syndrome coronavirus (MERS-CoV) illness in humans are incompletely understood. In this article they identified all primary MERS-CoV cases reported in Saudi Arabia during March–November 2014 by excluding those with history of exposure to other cases of MERS-CoV or acute respiratory illness of unknown cause or exposure to healthcare settings within 14 days before illness onset. Using a case–control design, they assessed differences in underlying medical conditions and environmental exposures among primary case-patients and 2–4 controls matched by age, sex, and neighborhood. Using multivariable analysis, they found that direct exposure to dromedary camels during the two weeks before illness onset, as well as diabetes mellitus, heart disease, and smoking, were each independently associated with MERS-CoV illness. Further investigation is needed to better understand animal-to-human transmission of MERS-CoV.

Web sources: [ECDC's latest rapid risk assessment](#) | [ECDC novel coronavirus webpage](#) | [WHO](#) | [WHO MERS updates](#) | [WHO travel health update](#) | [WHO Euro MERS updates](#) | [CDC MERS](#) | [Saudi Arabia MoH](#) | [Saudi Arabia statement](#) | [ECDC factsheet for professionals](#)

ECDC assessment

The MERS outbreak in the Middle East poses a low risk to the EU. Efforts to contain the nosocomial clusters in the affected countries are vital to prevent wider transmission. Although sustained human-to-human community transmission is unlikely, the residential cluster of cases reported from Saudi Arabia is a reminder that transmission to unprotected close contacts, not only in healthcare settings, remains possible, as also documented in outbreaks in the Republic of Korea and the United Arab Emirates.

Actions

ECDC published a [rapid risk assessment](#) on 21 October 2015.

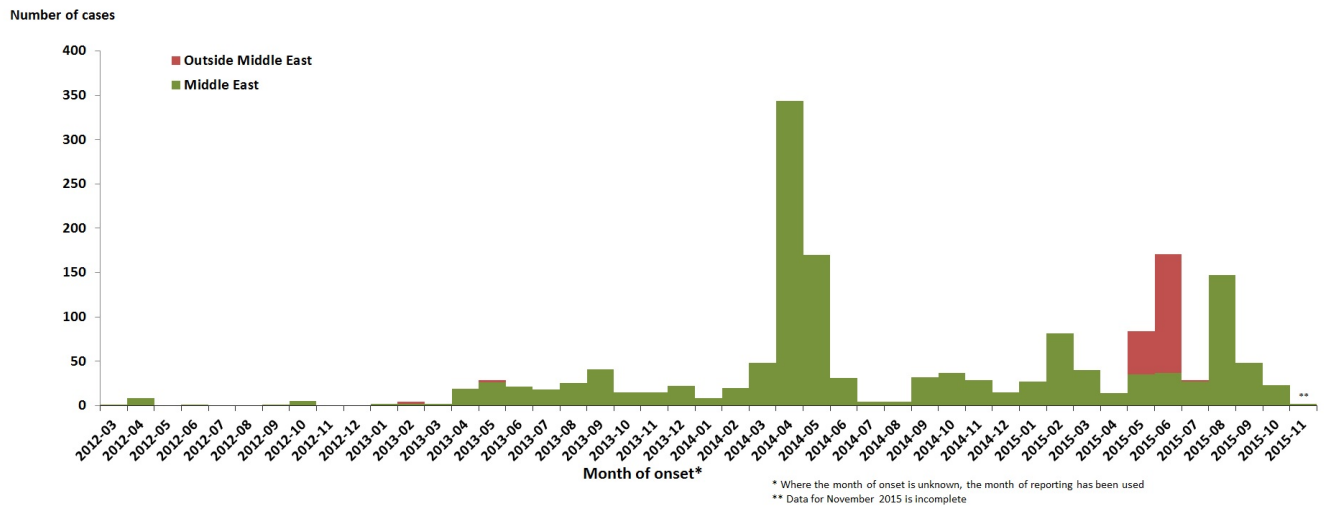
MERS-CoV by country of reporting, March 2012 – 5 November 2015 (n=1 637)

Source: ECDC

Region	Country	Number of cases	Number of deaths
Middle East	Saudi Arabia	1276	546
	United Arab Emirates	81	11
	Qatar	13	5
	Jordan	35	14
	Oman	6	3
	Kuwait	4	2
	Egypt	1	0
	Yemen	1	1
	Lebanon	1	0
	Iran	6	2
Europe	Turkey	1	1
	UK	4	3
	Germany	3	2
	France	2	1
	Italy	1	0
	Greece	1	1
	Netherlands	2	0
	Austria	1	0
Africa	Tunisia	3	1
	Algeria	2	1
Asia	Malaysia	1	1
	Philippines	3	0
	South Korea	185	37
	China	1	0
	Thailand	1	0
Americas	United States of America	2	0
	Global	1637	632

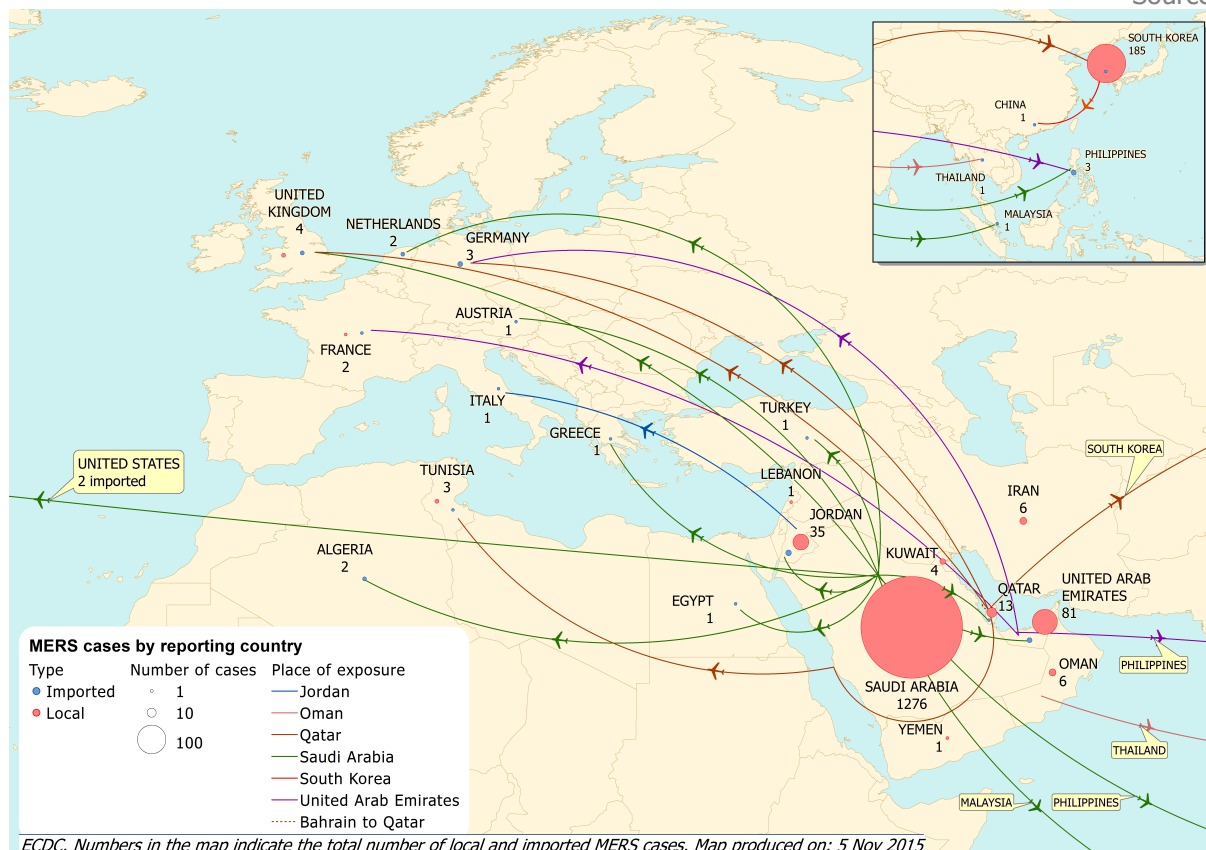
Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 5 November 2015 (n=1 637)

Source: ECDC



Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 5 November 2015 (n=1 637)

Source: ECDC



Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014

Latest update: 5 November 2015

Epidemiological summary

Distribution of cases as of 3 November 2015:

Countries with intense transmission:

- **Guinea:** 3 805 cases, of which 3 351 were confirmed; 2 536 deaths.
- **Sierra Leone:** 14 104 cases, of which 8 704 were confirmed; 3 955 deaths.

Countries with previously widespread and intense transmission:

- **Liberia:** declared Ebola-free on 3 September 2015.

Countries that have reported an initial case or localised transmission:

- Nigeria, Senegal, the USA, Spain, Mali, the UK and Italy.

Situation in West African countries

Guinea

According to [WHO](#), one confirmed case was reported from Guinea in the week leading up to 1 November. The additional case is a baby delivered in an Ebola treatment centre in Conakry and it is currently being treated. The infant's infection is the fourth reported from the same family in the village of Kondayah, in the subprefecture of Kaliah, in Forecariah district. The newborn's 25-year-old mother, whose Ebola infection was confirmed the previous week, died after giving birth. Ebola infections had been confirmed in two of the woman's other young children whose illnesses were also announced last week. According to the WHO, the baby's illness is the tenth in the Forecariah branch of a transmission chain that began in Conakry's Ratoma area.

Guinea is monitoring 382 contacts, which include 43 in Conakry and 339 in Forecariah district of which 141 are high risk. The contact from Forecariah indicated last week as lost to follow-up in the past 42 days is still missing.

Sierra Leone

All contacts linked to the country's two most recently active chains of transmission, Bombali and Kambia, have completed a 21-day follow-up as of 4 October. The country will be declared free of VD transmission on 7 November if no further cases are reported.

Situation among healthcare workers

No new health worker infections were reported by WHO in the week leading up to 1 November.

Outside of the three most affected countries, with repatriated cases included, there has been 8 cases in Mali, 20 in Nigeria, 3 in Spain (including two repatriated cases), 3 in the UK (including two repatriated cases), 1 in Senegal, 1 in Norway (repatriated), 2 in France (repatriated), 1 in the Netherlands (repatriated), 1 in Switzerland (repatriated), 11 in the USA (7 repatriated) and 1 in Italy (infected in Sierra Leone).

Images

- Epicurve 1: the epicurve shows the confirmed cases in the three most affected countries. In order to better represent the tail of the epidemic, only the data for 2015 are shown.
- Epicurve 2: the epicurve shows the confirmed cases in Guinea and Sierra Leone. In order to better represent the tail of the epidemic, only the data for 2015 are shown.

Web sources: [ECDC Ebola page](#) | [ECDC Ebola and Marburg fact sheet](#) | [WHO situation summary](#) | [WHO Roadmap](#) | [WHO Ebola Factsheet](#) | [CDC](#) | [Ebola response phase 3: Framework for achieving and sustaining a resilient zero](#) | [ReEBOV Antigen Rapid Test Kit](#) | [Institut Pasteur will open a lab in Conakry](#) | [Emergency Operation Centres in the three affected countries](#) | [Entry screening in US](#)

ECDC assessment

This is the largest-ever documented epidemic of EVD, both in terms of numbers and geographical spread. The epidemic of EVD increases the likelihood that EU residents and travellers to the EVD-affected countries will be exposed to infected or ill persons. The risk of infection for residents and visitors in the affected countries through exposure in the community is considered low if they adhere to the recommended precautions. Residents and visitors to the affected areas run a risk of exposure to EVD in healthcare facilities.

The risk of importing EVD into the EU and the risk of transmission within the EU following an importation remains low or very low as a result of the range of risk reduction measures that have been put in place by the Member States and by the affected countries in West Africa. However, continued vigilance is essential. If a symptomatic case of EVD presents in an EU Member State, secondary transmission to caregivers in the family and in healthcare facilities cannot be excluded.

The number of confirmed cases has remained low since the end of July. The introduction of an EVD case into unaffected countries remains possible as long as cases exist in any country. With adequate preparation, however, such an introduction can be contained through a timely and effective response. Following the recent report about the previously positive EVD UK nurse, unusual late complications should also be taken into account.

Actions

As of 5 November 2015, ECDC has deployed 95 experts (on a rotating basis) from within and outside the EU in response to the Ebola outbreak. This includes an ECDC-mobilised contingent of experts to Guinea. ECDC is reporting this threat on a weekly basis

in the CDTR.

The latest (13th) update of the [rapid risk assessment](#) was published on 16 October 2015.

On 16 October 2015, ECDC published [Recent development on sexual transmission of Ebola virus](#).

On 31 July 2015, ECDC published [Positive preliminary results of an Ebola vaccine efficacy trial in Guinea](#).

On 22 January 2015, ECDC published [Infection prevention and control measures for Ebola virus disease. Management of healthcare workers returning from Ebola-affected areas](#).

On 4 December 2014, EFSA and ECDC published a [Scientific report assessing Risk related to household pets in contact with Ebola cases in humans](#).

On 29 October 2014, ECDC published a training tool on the [safe use of PPE and options for preparing for gatherings in the EU](#).

On 23 October 2014, ECDC published [Public health management of persons having had contact with Ebola virus disease cases in the EU](#).

On 22 October 2014, ECDC published [Assessing and planning medical evacuation flights to Europe for patients with Ebola virus disease and people exposed to Ebola virus](#).

On 13 October 2014, ECDC published [Infection prevention and control measures for Ebola virus disease: Entry and exit screening measures](#).

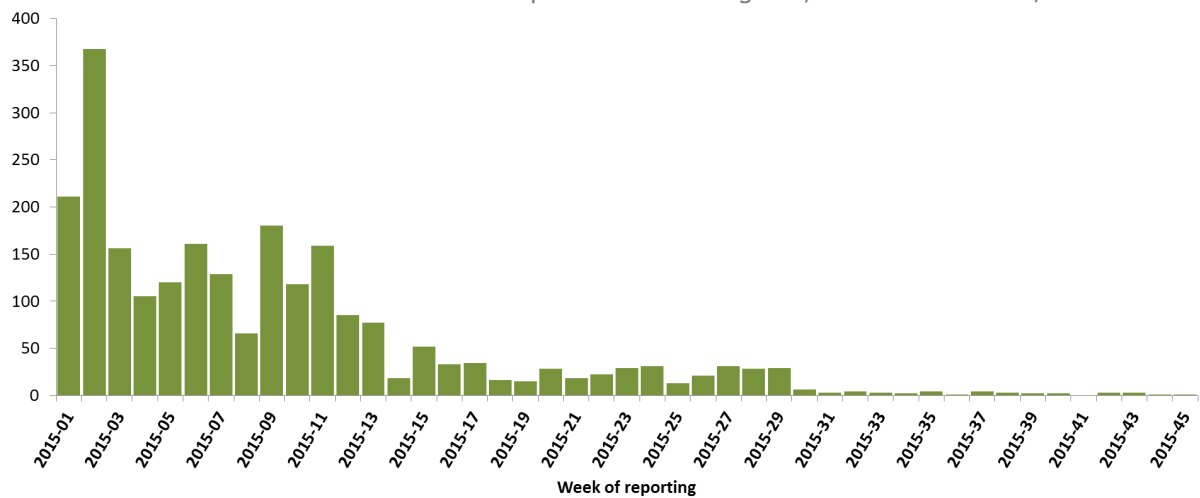
On 6 October 2014, ECDC published [risk of transmission of Ebola virus via donated blood and other substances of human origin in the EU](#).

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

On 10 September 2014, ECDC published an [EU case definition](#).

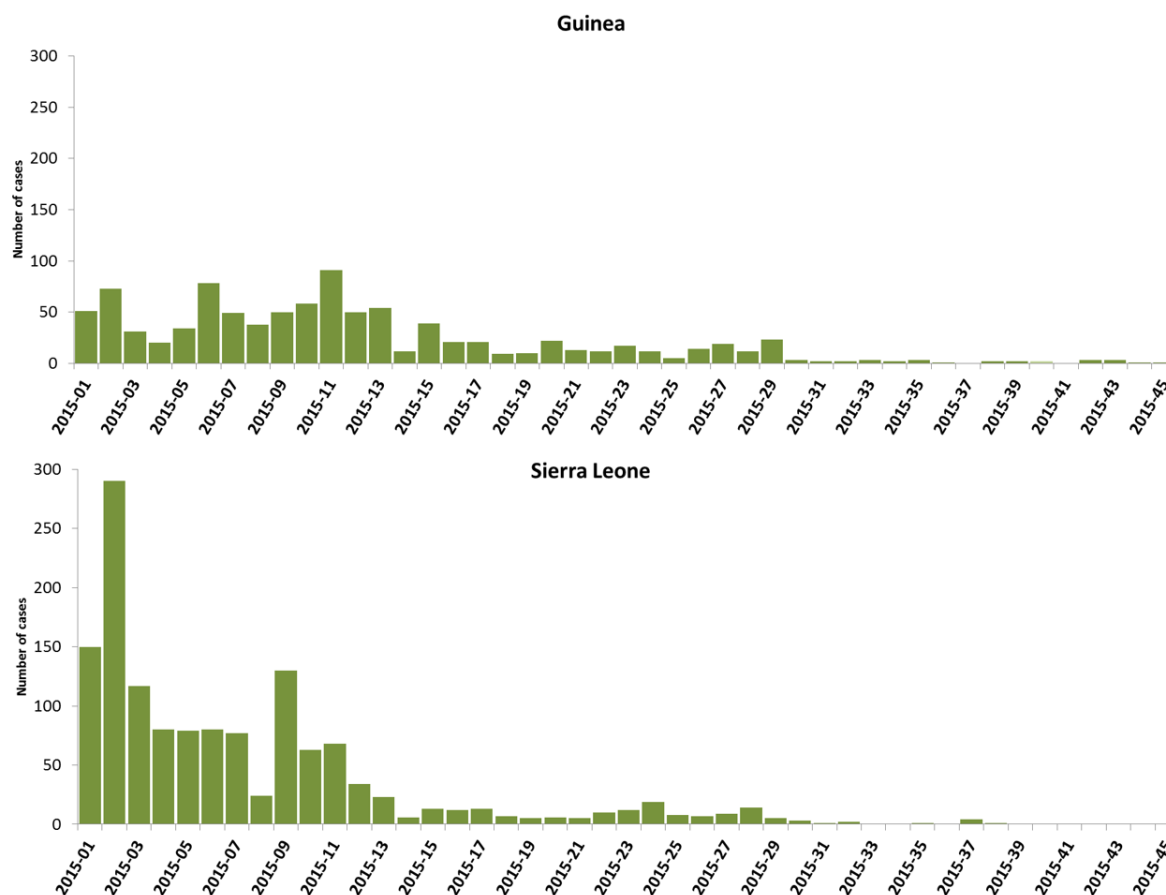
Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 01/2015 to 45/2015)

Adapted from WHO figures; *data for week 45/2015 are incomplete



Distribution of confirmed cases of EVD by week of reporting in Guinea and Sierra Leone (weeks 01/2015 to 45/2015)

Adapted from WHO figures; *data for week 45/2015 are incomplete



Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013

Latest update: 5 November 2015

Epidemiological summary

Europe

No autochthonous cases of chikungunya virus infection have been reported in EU Member States so far in 2015. According to [InVS](#), 27 imported cases of chikungunya have been reported in **France** in areas where the vector is present.

Americas

Chikungunya cases in the Caribbean and the Americas continued to moderately increase during the past couple of weeks, but at a much lower level compared with the same period last year. According to the latest update from the [WHO Pan American Health Organization](#) (WHO PAHO) on 30 October 2015, 15 552 new suspected and confirmed cases and five additional deaths have been reported since 16 October. Since the beginning of the year and as of 30 October 2015, WHO PAHO has reported 613 135 suspected and confirmed cases of chikungunya virus infection and 68 deaths in the WHO Region of the Americas.

The highest number of cases during the past two weeks was reported in **Colombia** with 2 552 new suspected cases recorded.

USA

As of 3 November, 562 chikungunya virus disease cases have been reported from 42 US states so far this year, according to the [US CDC](#). All reported cases occurred in travellers returning from affected areas. No locally-transmitted cases have been reported. In addition, 152 chikungunya cases have been reported from US territories. All reported cases were locally-transmitted cases reported from **Puerto Rico** and the **US Virgin Islands**.

Pacific region

As of 25 October, 1 345 cases have been reported from the **Marshall Islands** since February 2015. The number of weekly cases reported has been decreasing. There is an ongoing outbreak in **Tuvalu**, according to the [Pacific Public Health Surveillance Network](#).

Africa

In **Sudan**, between 29 August and 30 October 2015, 200 suspected viral haemorrhagic fever cases, including 104 deaths were reported from South, East, Central, West and North Darfur. Laboratory analysis of 50 samples collected from suspected cases found that four samples from West and Central Darfur were positive for Chikungunya virus, according to [WHO EMRO](#).

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

ECDC assessment

Outbreaks are still ongoing in the Caribbean and Americas. Cases continued to moderately increase in the past two weeks but at a lower level compared with the same period last year. The vector is endemic in these 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.

Europe is vulnerable to the autochthonous transmission of chikungunya virus. The risk for onward transmission in Europe is linked to importation of the virus by viraemic patients in areas with competent vectors (*Aedes albopictus* in mainland Europe, primarily around the Mediterranean, and *Aedes aegypti* on Madeira). Autochthonous transmission from an imported viraemic chikungunya case is possible during the summer season in the EU.

Actions

ECDC published an [epidemiological update](#) on 16 September regarding the false positive case of chikungunya in Valencia province, Spain. Despite the fact that autochthonous transmission has not been confirmed in Spain, the conclusions of ECDC's [rapid risk assessment](#) published on 24 August remain valid.

ECDC monitors the global chikungunya situation on a bi-weekly basis.

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

Opening date: 15 June 2005

Latest update: 4 November 2015

Epidemiological summary

Update: No new update from WHO on human cases of influenza A(H5N1) virus since 17 July 2015.

Summary: From 2003 through to 15 October 2015, 844 laboratory-confirmed human cases of avian influenza A(H5N1) virus infection have been officially reported to WHO from 16 countries. Of these cases, 449 have died.

Outbreaks in birds

Various influenza A(H5) subtypes, such as influenza A(H5N1), A(H5N2), A(H5N6) and A(H5N8), continue to be detected in birds in West Africa and Asia, according to recent reports received by [World Organisation for Animal Health](#) (OIE).

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

ECDC assessment

Most human infections of avian influenza 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 are not unexpected. There are currently no indications of a significant change in the epidemiology associated with any clade or strain of the A(H5N1) and A(H7N9) 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 was reported by Egypt during the first half of 2015, this increase is not thought to be related to virus mutations but rather to more people becoming exposed to infected poultry.

Although the influenza A(H5) viruses detected in birds 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 monthly 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.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 29 October 2015

Epidemiological summary

As of 5 November 2015, 679 laboratory-confirmed cases of human infection with avian influenza A(H7N9) viruses, including at least 275 deaths, have been reported to WHO.

Cases in China since March 2013 have the following geographical distribution: Zhejiang (186), Guangdong (181), Jiangsu (78), Fujian (63), Shanghai (48), Hunan (26), Anhui (32), Hong Kong (13), Xinjiang Uygur Zizhiqu (10), Jiangxi (9), Beijing (6), Shandong (6), Guangxi (4), Henan (4), Taiwan (4), Jilin (2), Guizhou (2) and Hebei (2).

Three imported cases have also been reported: one in Malaysia and two in Canada.

Web sources: [Chinese CDC](#) | [WHO](#) | [WHO FAQ page](#) | [ECDC](#) | [WHO avian influenza updates](#)

ECDC assessment

This outbreak is caused by a novel reassortant avian influenza virus capable of causing severe disease in humans. This is a zoonotic outbreak, in which the virus is transmitted sporadically to humans in close contact with the animal reservoir, similar to the influenza A(H5N1) situation.

During 2015, there have been continued avian influenza A(H7N9) virus detections in the animal population in multiple provinces in China, indicating that the virus persists in the poultry population. If the pattern of human cases follows the trends seen in previous years, the number of human cases may rise over the coming months. Further sporadic cases of human infection with avian influenza A(H7N9) virus are therefore expected in affected and possibly neighbouring areas.

Imported cases of influenza A(H7N9) may be detected in Europe. However, the risk of the disease spreading among humans following an importation to Europe is considered to be very low. People in the EU presenting with severe respiratory infection and a history of potential exposure in the outbreak area will require careful investigation in Europe.

Actions

The Chinese health authorities continue to respond to this public health event with enhanced surveillance, epidemiological and laboratory investigation, including scientific research.

ECDC published an updated [Rapid Risk Assessment](#) on 3 February 2015.

ECDC published a guidance document [Supporting diagnostic preparedness for detection of avian influenza A\(H7N9\) viruses in Europe](#) for laboratories on 24 April 2013.

Distribution of confirmed cases of A(H7N9) by week of onset (n=679) from February 2013 until 6 November 2015

Source: ECDC



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 29 October 2015

Epidemiological summary

Worldwide in 2015 so far, 51 wild poliovirus type 1 (WPV1) cases have been reported to WHO, compared with 277 for the same period in 2014. Since the beginning of the year, two countries have reported cases: Pakistan (38 cases) and Afghanistan (13 cases).

In 2015 so far, 16 cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO, compared with 42 for the same period in 2014 from Madagascar (10), Nigeria (1), Ukraine (2), Mali (1) and Lao (2). In Lao, an emergency outbreak response is taking place, together with immunisation campaigns.

Web sources: [Polio Eradication: weekly update](#) | [MedISys Poliomyelitis](#) | [ECDC Poliomyelitis factsheet](#) | [Temporary Recommendations to Reduce International Spread of Poliovirus](#) | [WHO Statement on the Sixth Meeting of the International Health](#)

16/18

[Regulations Emergency Committee on Polio](#)

ECDC assessment

The last locally acquired wild-polio cases within the current EU borders were reported from Bulgaria in 2001. The most recent wild-polio outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

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

Actions

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

Following the recent detection of the cases of circulating vaccine-derived poliovirus type 1 in Ukraine, ECDC published a rapid risk assessment on its [website](#).

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