

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

#### Salmonella Enteritidis - Riga Cup, Latvia - April 2015

Opening date: 20 April 2015

Latest update: 7 May 2015

A multinational outbreak of *Salmonella* Enteritidis was affecting the participants of the ice hockey tournament 'Riga Cup 2015'. The outbreak is reported to have affected more than 150 participants. The source of the outbreak has not yet been identified.

→Update of the week

No cases have been reported in the last two weeks.

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

Opening date: 9 October 2014

Latest update: 22 May 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

In week 20, all countries reported low intensity of influenza activity with only a few sporadic influenza virus detections across the Region, indicating a return to the baseline level. Weekly reporting for the 2014–15 influenza season ends this week and will start again in week 40 for the 2015–16 season. The duration of the 2014–15 season was 21 weeks (week 51/2014–19/2015), with peak activity in week 7/2015.

## Non EU Threats

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### Invasive infection by *Mycobacterium chimaera* 2014 -2015 - Multistate Europe

Opening date: 9 April 2015

Latest update: 7 May 2015

Since 2011, cases of invasive cardiovascular infection caused by *Mycobacterium chimaera* have been detected in patients having previously undergone cardiac surgery in Switzerland, the Netherlands, Germany and the UK. Aerosolisation of water from the heater-cooler units for extracorporeal circulation in the operating room is considered the most plausible route of infection.

→Update of the week

In the UK, retrospective case finding identified 13 patients with *M. chimaera* or other *M. avium* complex endocarditis, surgical site infection or disseminated infection within four years of surgery involving cardiopulmonary bypass. These patients had surgery in different hospitals in the UK between 2007 and 2014. A report published yesterday by Public Health England states 'a definitive link between the heater cooler units and the patient infections has not been established by the UK investigation'. Further microbiological investigations are underway. Microbiological investigation at multiple hospital sites in the UK has indicated that non-tuberculous mycobacteria (common environmental organisms) can be found in the water within healthcare units. Non-tuberculous mycobacteria have also been detected in the air around the devices at some of these sites.

### Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014

Latest update: 21 May 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.

→Update of the week

As of 19 May 2015, WHO reported 27 007 cases of Ebola virus disease related to the outbreak in West Africa, including 11 137 deaths. According to WHO, the week from 11 to 17 May saw the highest number of confirmed cases of Ebola virus disease for over a month, with 35 cases reported from Guinea and Sierra Leone. This is a substantial increase compared with nine cases reported during the previous week. The geographical area of transmission has expanded, with six districts reporting cases (three in Guinea, three in Sierra Leone), compared with only three in the previous week.

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

Opening date: 24 September 2012

Latest update: 21 May 2015

Since April 2012 and as of 21 May 2015, 1 152 cases of MERS-CoV have been reported by local health authorities worldwide, including 471 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 on 13 May, [Saudi Arabia](#) has reported six additional cases of MERS-CoV infection and six deaths in previously reported cases.

On 20 May 2015 the [South Korean Centers for Disease Control and Prevention](#) reported a case of MERS-CoV in a 68-year-old man, who worked in Bahrain from 18 April until 3 May 2015 in crop farming. He travelled back to South Korea through Qatar on 4 May without experiencing symptoms. Seven days after his arrival to South Korea on 11 May, he developed a cough and a fever. The patient visited an outpatient facility and was hospitalised prior to his last admission to a specialised unit on 20 May 2015. On 21 May 2015, the [South Korean Centers for Disease Control and Prevention](#) confirmed two additional cases resulting from contact to the case reported on 20 May. The second case is the wife of the 68-year-old man, who took care of the patient while he was sick at home. The third case is a 76-year-old male who shared a hospital room with the 68-year-old male from 15 to 17 May 2015. Currently 64 people who have been in contact with the cases are being monitored for 14 days.

[United Arab Emirates](#) have reported two asymptomatic cases following enhanced surveillance. According to [WHO](#) one of the cases is a 29-year-old, truck driver who frequently transports camels from Oman to UAE. He travelled to Ibri city, Oman on 6 May and transported camels to Abu Dhabi on 9 May. As part of the national policy of testing all imported camels for MERS-CoV, on 9 May, laboratory examinations were carried-out on the camels that the truck driver was transporting. The animals tested positive for MERS-CoV on 10 May. This triggered an investigation of the truck driver on the same day. Following hospital admission, the patient tested positive for MERS-CoV on 12 May. He was asymptomatic at the time of laboratory testing.

On 21 May 2015 [Qatar](#) reported a case of a 29-year-old man, who works in the camel breeding business. According to the media, the patient had symptoms of fever and cough five days prior to seeking help at a healthcare centre.

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

Opening date: 15 June 2005

Latest update: 7 May 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 the last update on 15 May, no additional human cases of influenza A(H5N1) have been reported in Egypt or elsewhere in the world.

[WHO EMRO](#) has posted a statement following a recent mission of six organisations assessing the H5N1 situation in Egypt.

## Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 14 May 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 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.

Polio eradication is one of the topics that are being discussed at the World Health Assembly in Geneva this week.

## II. Detailed reports

### Salmonella Enteritidis - Riga Cup, Latvia - April 2015

Opening date: 20 April 2015

Latest update: 7 May 2015

#### Epidemiological summary

A multinational outbreak of *Salmonella* Enteritidis was affecting participants of the ice hockey Riga Cup 2015 (5 000 participants). As of 21 May 2015, more than 150 cases from six different countries have been reported: Finland, Sweden, Norway, the UK, Lithuania and Estonia. The source of the outbreak has not yet been identified.

The Latvian food safety authorities and public health authorities are conducting epidemiological and environmental investigations. Samples collected from the environment and the personnel cafeterias in the arenas where the tournament took place have all been negative. Public health authorities in Finland and Sweden are interviewing cases to identify possible exposures.

#### ECDC assessment

Considering that all cases reported were participating in the junior hockey cup in Riga (cases clustered in time and place), and that the results of the microbiological typing confirmed a link between the cases, this outbreak can be considered a persistent point source outbreak with a common exposure. The Riga Cup tournament has ended but other tournaments continue until the end of May. Despite the source(s) of infection still not identified, no new cases were detected in the past two weeks which would indicate that the measure implemented in the venues cafeterias in Riga might have been successful.

#### Actions

ECDC has published a [Rapid Risk Assessment](#). ECDC deployed an expert and an EPIET fellow to Riga during the last week to assist in the outbreak investigation in Latvia. All participating teams have been contacted via e-mail. A questionnaire was developed to be distributed to the affected teams. Cohort studies are ongoing in three countries and ECDC will support the merging of the results.

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

Opening date: 9 October 2014

Latest update: 22 May 2015

#### Epidemiological summary

Low intensity of influenza activity was reported by 40 countries. During the season, influenza A(H1N1)pdm09, A(H3N2) and type B viruses circulated in the Region, with A(H3N2) type B viruses accounting for 67% of sentinel detections. Excess all-cause mortality among people aged 65 years and above, concomitant with increased influenza activity and the predominance of A(H3N2) viruses, was observed in most countries participating in the European project monitoring excess mortality for public health action (EuroMOMO), but has now abated (see the EuroMOMO website). Antigenic drift in a proportion of A(H3N2) viruses was observed in the 2014–2015 influenza season, so the northern hemisphere vaccine did not provide broad protection against A(H3N2) viruses. Despite some antigenic drift among B/Yamagata viruses, the A(H1N1)pdm09 and B/Yamagata components in the vaccine are likely to protect against circulating viruses. Of all the influenza viruses screened for reduced susceptibility to neuraminidase inhibitors, only five A(H3N2) viruses and one A(H1N1)pdm09 virus have shown genetic or phenotypic evidence of reduced susceptibility.

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

#### ECDC assessment

All countries reported low intensity of influenza activity, with only a few sporadic influenza virus detections across the Region indicating a return to the baseline level.

#### Actions

Weekly reporting for the 2014–15 influenza season ends this week and will resume in week 40 for the 2015–16 season. In summer, reporting will continue monthly.

## Invasive infection by *Mycobacterium chimaera* 2014 -2015 - Multistate Europe

Opening date: 9 April 2015

Latest update: 7 May 2015

### Epidemiological summary

Since 2011, cases of invasive cardiovascular infection caused by *M. chimaera* in patients having previously undergone cardiac surgery in Switzerland, the Netherlands and Germany have been reported by the relevant authorities. Switzerland has reported six *M. chimaera* infections: three cases of endocarditis, one bloodstream infection and two vascular graft infections. Two of the six had fatal outcomes related to the infection. The clinical manifestations included osteomyelitis and involvement of multiple organs such as the eye and spleen. Three cases of *M. chimaera* infection, one of which was fatal, were identified in the Netherlands in patients following cardiac surgery. A case has also been reported in Germany. Investigation in Switzerland included microbiological examination of environmental samples that identified *M. chimaera* contamination in heater-cooler units used during cardiac operations, including water samples from the units. Air sampling cultures became positive for *M. chimaera* when units were running but not if they were turned off. Some strains from air and water samples showed matching Random Amplified Polymorphic DNA (RAPD)-PCR patterns. This suggests *M. chimaera*-contaminated heater-cooler units as a potential source of infection. Heater-cooler units are used to regulate the temperature of the blood during extracorporeal circulation and use filtered tap water as a heat exchanger.

**Web sources:** [ECDC rapid risk assessment](#) | [Netherlands authorities](#) | [Swiss authorities](#) | [Clinical Infectious Diseases Journal](#) | [German Federal Institute of Medicines and Medicinal Products](#) | [UK authorities](#)

### ECDC assessment

ECDC is gathering information in collaboration with affected countries to evaluate the public health risk of cardiovascular-surgery-associated invasive infections with *M. chimaera* potentially linked to heater-cooler units, and will update its risk assessment as new evidence is obtained. Healthcare providers involved in caring for patients who have undergone open-heart surgery or other surgery involving cardiopulmonary bypass, such as lung transplant, should be vigilant for cases of endocarditis or other cardiovascular, deep-surgical-site or disseminated infection of unidentified origin. They should also consider testing specifically for slow-growing non-tuberculous mycobacteria such as *M. chimaera*. Regulatory bodies in charge of licensing and agencies monitoring the safety of such devices should be aware of the potential association of invasive cardiovascular infections caused by *M. chimaera* with heater-cooler units and relevant information should be disseminated to all centres performing cardiac surgery.

### Actions

ECDC published a [Rapid Risk Assessment](#) on 30 April 2015.

ECDC collaborates with the investigators for the development of a common protocol for case finding, laboratory diagnosis and environmental testing.

## Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014

Latest update: 21 May 2015

### Epidemiological summary

Distribution of cases as of 19 May 2015:

Countries with intense transmission

- **Guinea:** 3 649 cases, of which 3 204 are confirmed, and 2 409 deaths.
- **Sierra Leone:** 12 656 cases, of which 8 607 are confirmed, and 3 907 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 tested positive on 12 May 2015).

### Situation in West African countries

5/17

In **Guinea**, WHO reported 27 new confirmed cases in the week up to 17 May, compared with seven cases during the previous week. The majority of cases were reported from the western prefectures of Dubreka (11 cases) and Forecariah (11 cases), with the remaining five cases reported from the north-western prefecture of Boke, which borders Guinea-Bissau. According to WHO, the cases in Boke were tightly clustered in the coastal sub-prefecture of Kamsar, and initial investigations suggest they may have originated from a chain of transmission in Conakry. Because of the proximity to Guinea-Bissau of the recent cluster of cases in the Guinean prefecture of Boke, a response team from Guinea-Bissau has been deployed at the border to assess points of entry. An epidemiological investigation team has also been mobilised to ensure tracing of contacts crossing the border. Nine of the 27 cases reported from Guinea originated from an unknown source, indicating that chains of transmission continue to evade detection in several areas.

In **Sierra Leone**, WHO reported eight new confirmed cases in the week up to 17 May. Those cases were reported from Freetown (four cases), Port Loko (three cases) and Kambia (one case). Four of the eight cases reported from Sierra Leone were registered contacts of a previous case. An additional three cases were not registered contacts, but were found on further investigation to have had contact with a previous case. The remaining case, reported from Freetown, was identified after post-mortem testing of a community death.

### Situation among healthcare workers

According to WHO, the last case in a healthcare worker in Guinea was reported on 6 April. In Sierra Leone, a new case in a healthcare worker was laboratory confirmed on 14 May. The case is a Sierra Leone national who was working at the same facility as an Italian healthcare worker who tested positive for Ebola.

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, two Ebola-infected healthcare workers were reported in Mali, 11 in Nigeria, one in Spain (infected while caring for an evacuated EVD patient), two in the UK (both infected in Sierra Leone), six in the USA (two infected in Sierra Leone, two in Liberia, and two infected while caring for a confirmed case in Texas) and one in Italy (infected in Sierra Leone).

### Medical evacuations and repatriations from EVD-affected countries

Since the beginning of the epidemic and as of 22 May 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

**Italy:** On 12 May 2015, the [health authorities](#) in Italy reported an EVD case in a volunteer healthcare worker who returned to Italy from Sierra Leone on 7 May. The patient developed symptoms on 10 May and was hospitalised the day after. After he was confirmed with EVD on 12 May, he was securely transferred to the National Institute for Infectious Diseases in Rome. According to the daily [medical bulletin](#) released by Spallanzani hospital in Rome, the condition of the patient is stable. As of 19 May 2015, 19 contacts (including close relatives, healthcare workers and laboratory technicians) are in voluntary self-isolation in Sardinia with active monitoring of clinical condition. No high-risk contacts have been identified.

The [Italian media](#) is speculating about an ongoing internal investigation on how the Ebola patient was handled in Sassari.

### Images

- Epicurve 1 and 2: the epicurves show the confirmed cases in the three most affected countries.
- 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](#) | [Daily medical bulletins from Lazzaro Spallanzani hospital](#) | [Italian media](#) | [Latest available situation summary](#) | [Italian health ministry](#)

### 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, the number of cases has increased in Guinea during the last week. In Sierra Leone, the number of reported cases has been stable in the past four weeks. In Guinea, less than one fourth of all new confirmed cases are identified among registered Ebola 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 22 May 2015, ECDC has deployed 65 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](mailto:alice.friaux@ecdc.europa.eu) with copy to [support@ecdc.europa.eu](mailto: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](#).

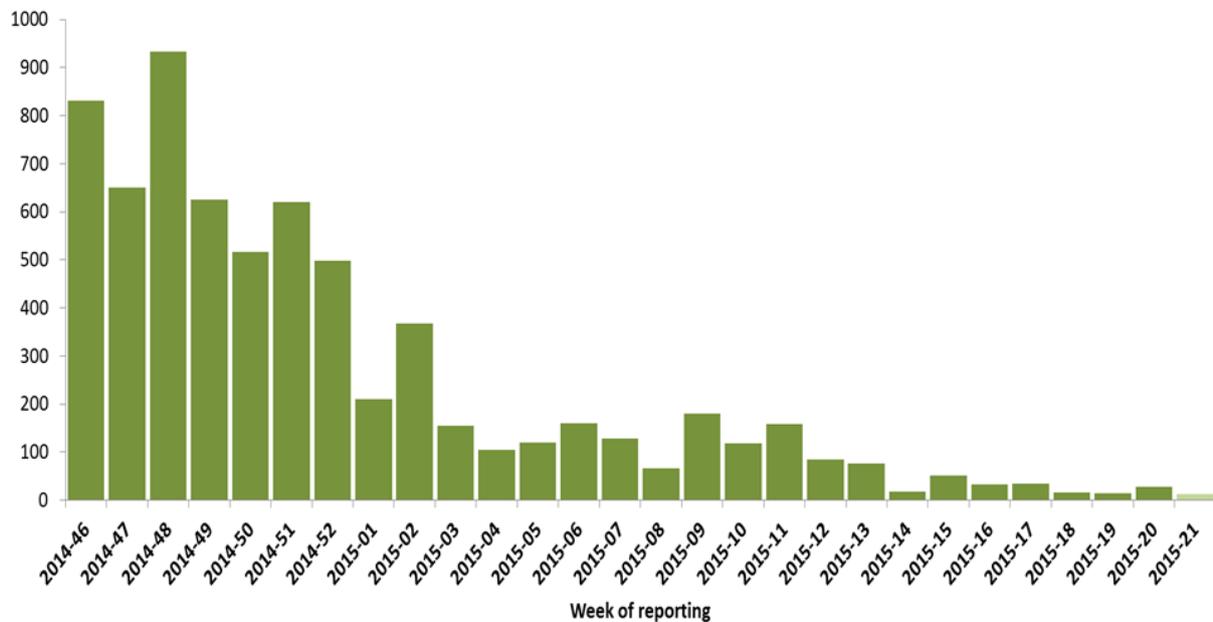
On 6 October 2014, ECDC published [risk of transmission of Ebola virus via donated blood and other substances of human origin in the EU](#).

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](#).

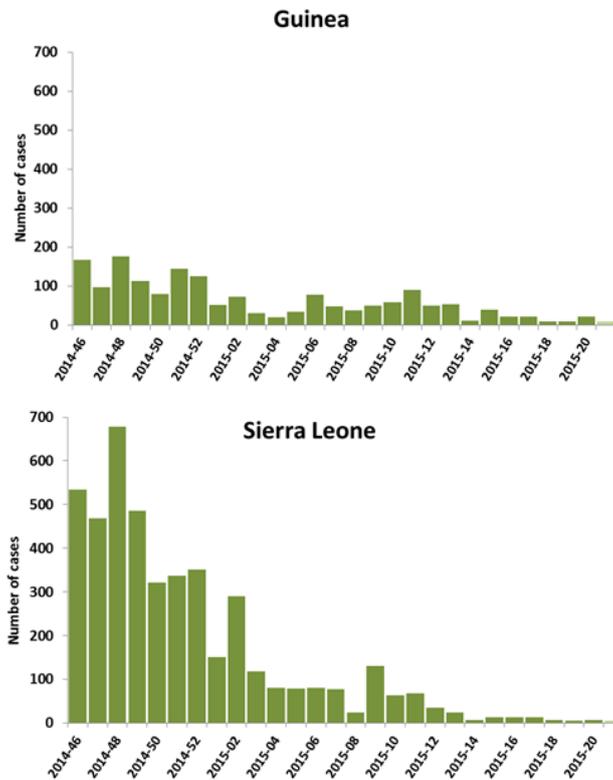
## Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 46/2014 to 21/2015)

Adapted from WHO figures; \*data for week 21/2015 are incomplete



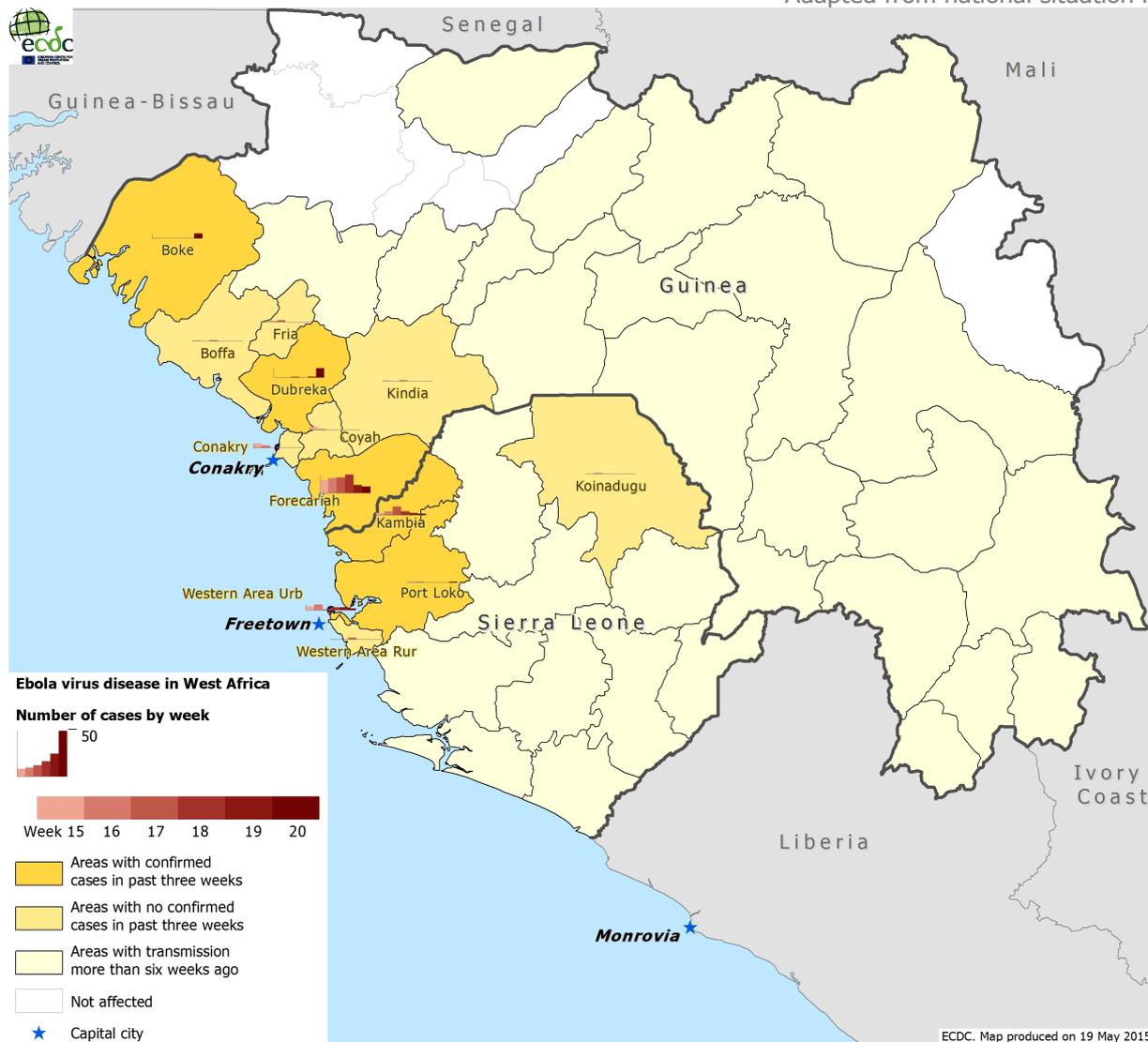
Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 46/2014 to 21/2015)

Adapted from WHO figures; \*data for week 21/2015 are incomplete



## Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (as of week 20/2015)

Adapted from national situation reports



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

Opening date: 24 September 2012

Latest update: 21 May 2015

### Epidemiological summary

Since April 2012 and as of 21 May 2015, 1 154 cases of MERS-CoV have been reported by local health authorities worldwide, including 471 deaths.

The distribution is as follows:

Confirmed cases and deaths by region:

#### Middle East

Saudi Arabia: 1 002 cases/434 deaths

United Arab Emirates: 76 cases/10 deaths

Qatar: 12 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: 6 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

South Korea: 3 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 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 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.

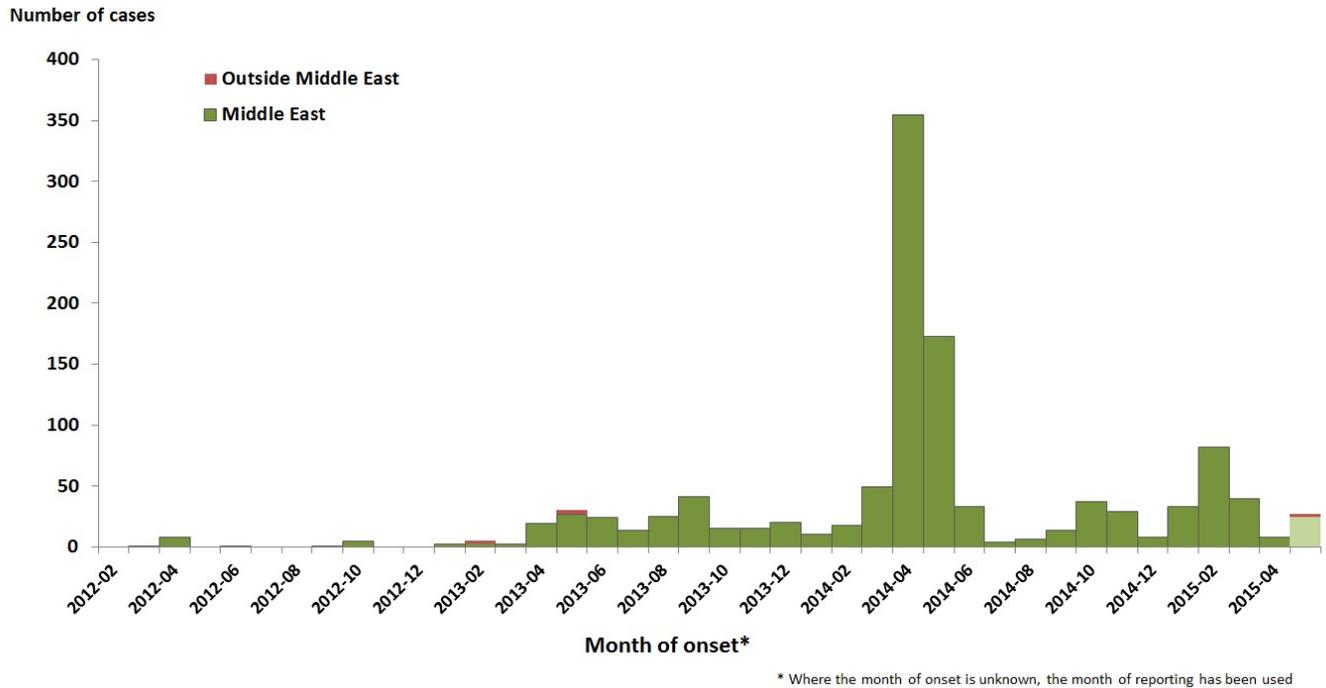
### Actions

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

ECDC published a [factsheet for health professionals regarding MERS-CoV](#) on 20 August 2014. From week 18 onwards, ECDC will monitor the situation on a monthly basis.

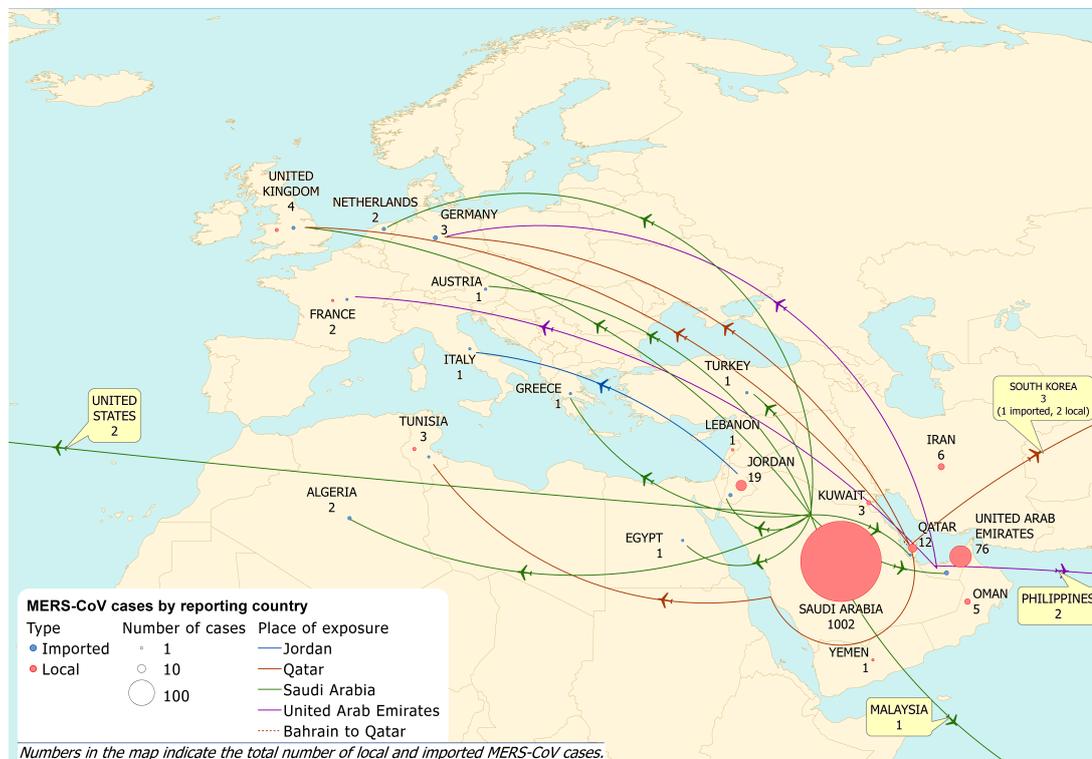
## Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 21 May 2015 (n=1 154)

Source: ECDC



## Distribution of confirmed cases of MERS-CoV by probable place of infection, March 2012 – 21 May 2015

Source: ECDC



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

Opening date: 15 June 2005

Latest update: 7 May 2015

### Epidemiological summary

#### Egypt

In Egypt, as of 22 May 2015, the Ministry of Health and Population has reported 140 human cases of influenza A(H5N1), including 39 deaths in 2015. Since 2006, Egypt has reported 342 human cases, according to WHO/FAO.

#### 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

Turkey: Last week, Turkey reported its third recent outbreak of H5N1 in poultry in Manisa province, near the Aegean Sea in west-central Turkey.

USA: Since December 2014, the United States Department of Agriculture has confirmed several cases of highly pathogenic avian influenza (HPAI) H5 in the Pacific, Central, and Mississippi flyways (or migratory bird paths). The disease has been found in wild birds, as well as in a few backyard and commercial poultry flocks. The Centers for Disease Control and Prevention (CDC) considers the risk to people from these HPAI H5 infections to be low. Sixteen states are currently affected by outbreaks of avian flu and more than 38 million birds have either died or will be killed to contain the virus' spread. Iowa, Minnesota and South Dakota reported H5 cases in poultry during last week.

Taiwan: Six more H5N2 and two H5N8 outbreaks were reported to the OIE during the past week.

India: During the past week, India reported two H5N1 avian flu outbreaks in widely separated states—Andhra Pradesh in the southern part of the country and Manipur in the northeast, near Myanmar.

**Web sources:** [ECDC Rapid Risk Assessment](#) | [Avian influenza on ECDC website](#) | [United States Department of Agriculture](#) | [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 over the past few months, it is not thought to be related to virus mutations but rather to more people becoming exposed to infected poultry. Although all influenza viruses evolve over time, preliminary laboratory investigation has not detected major genetic changes in the limited number of viruses isolated from the patients and animals in Egypt compared to previously circulating isolates thus far, but further in depth analysis is ongoing.

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 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

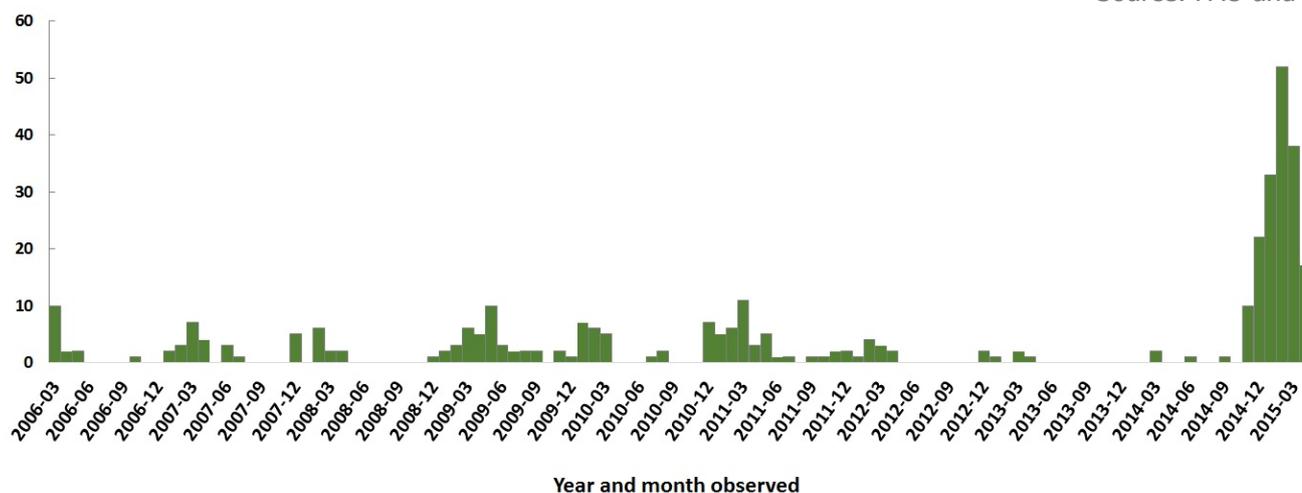
ECDC monitors the worldwide A(H5N1) situation through epidemic intelligence activities on a weekly basis in order to identify significant changes in the epidemiology of the virus. ECDC re-assesses the potential of a changing risk for A(H5N1) to humans on a regular basis.

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.

## Distribution of human influenza A(H5N1) cases in Egypt by month and year– March 2006 to April 2015

Source: FAO and WHO



## Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 14 May 2015

### Epidemiological summary

Worldwide in 2015, 24 wild poliovirus type 1 (WPV1) cases have been reported to WHO so far, compared with 82 for the same period in 2014. Since the beginning of the year, two countries have reported cases: Pakistan (23 cases) and Afghanistan (one case).

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

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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.