

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

#### **New! Crimean-Congo haemorrhagic fever – Spain - 2016**

Opening date: 1 September 2016

Latest update: 2 September 2016

Spanish health authorities report two cases (one fatal) of Crimean-Congo haemorrhagic fever (CCHF). The fatal case had no travel history to exotic countries but had noticed a tick bite after a walk in the countryside. The second case is an intensive care unit (ICU) nurse who had been involved in caring for the patient and who is currently hospitalised.

#### **Increase in cases of Salmonella Enteritidis MLVA profile 2-9-7-3-2 - multistate - Europe - 2016**

Opening date: 4 March 2016

Latest update: 2 September 2016

On 25 August 2016, the Netherlands launched an Urgent Inquiry reporting an increase of *Salmonella* Enteritidis PT8 with the MLVA-pattern 2-9-7-3-2. Belgium, Denmark, Norway, Sweden and the United Kingdom reported human cases with the same MLVA profile. On 18 January 2016, the UK (Scotland) had launched an Urgent Inquiry (UI) in EPIS-FWD reporting an increase in cases of *Salmonella* Enteritidis PT8 with the same MLVA profile 2-9-7-3-2, which resulted in three additional countries reporting cases with MLVA profile, but did not identify a common source or vehicle at the time.

##### →Update of the week

The United Kingdom report that *S. Enteritidis* 2-9-7-3-2 has re-emerged in Scotland since early July 2016 with 29 cases as of 17 August. Cases' age ranges from less than one year to over 80 years and the male to female ratio is 2.2. Two cases were associated with travel to Greece and one to Poland. Eight cases have been linked to three restaurants. No epidemiological links have been identified for other cases. WGS is currently being undertaken on 22 isolates to determine relationships with the 2-9-7-3-2 isolates from the 2015/2016 outbreak in which two genetically distinct clusters were observed. Results for one isolate have shown that it belongs to one of the two previously identified genetic cluster.

The Netherlands report nine additional cases for a total of 64 cases with the outbreak MLVA profile identified since May 2016.

## West Nile virus - Multistate (Europe) - Monitoring season 2016

Opening date: 30 May 2016

Latest update: 2 September 2016

During the June to November transmission season, ECDC monitors the situation in EU Member States and neighbouring countries in order to inform the blood safety authorities of areas affected by West Nile fever (WNF) and changes in the epidemiology of the disease.

### → Update of the week

During the past week, one probable case of West Nile was reported in Vukovar-Srijem county in Croatia. This is the first case reported by Croatia in 2016. Romania reported eight new cases in Bucharest (4), Dolj (1), Ialomita (2) and Ilfov (1). In neighbouring countries, Russia reported 25 new cases, 19 cases in the already-affected Saratovskaya Oblast, four cases in the already-affected Astrakhanskaja Oblast and one case each in the newly-affected Lipetsk and Volgograd Oblasts. In Serbia, six new cases were reported in already-affected districts of Grad Beograd (5) and Podunavski (1). Israel reported seven new cases in already-affected districts of Haifa (1), Jerusalem (1), Southern (2), Northern (2) and Tel Aviv (1) and one new case in the Merom Golan settlement in the Golan region.

## Non EU Threats

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

Opening date: 16 November 2015

Latest update: 2 September 2016

Since 1 February 2016, Zika virus infection and the related clusters of microcephaly cases and other neurological disorders constitute a public health emergency of international concern (PHEIC). Since 2015, and as of 2 September 2016, there have been 63 countries and territories reporting mosquito-borne transmission. According to WHO and as of 1 September 2016, 20 countries or territories have reported microcephaly and other central nervous system (CNS) malformations potentially associated with Zika virus infection or suggestive of congenital infection.

→Update of the week

#### The USA

Five new autochthonous cases have been reported in Florida since the last CDTR, bringing the number of locally transmitted cases to 47. As of 1 September, the number of autochthonous cases reported in Florida state is as follows: 40 cases in Miami-Dade, one in Broward, three in Palm Beach and one in Pinellas. The department is currently conducting an investigation into the other two cases to determine where exposure occurred. Health officials have been collecting and testing human samples, and mosquito abatement activities are underway in some of the involved areas.

On 26 August, the Food and Drug Administration ([FDA](#)) issued advice that all donations of blood and blood components should be tested for Zika.

#### WHO

According to the latest situation report, genetic sequencing of Zika virus isolates from four samples collected in Guinea-Bissau has preliminarily identified that these are related to the African lineage of the virus. Although the African lineage has not been associated with microcephaly and other neurologic complications, further surveillance is needed as there have been very few confirmed cases of the African lineage. At this point it is still too early to dismiss this possible threat.

#### British Virgin Islands (UK)

On 25 August, health authorities reported five locally acquired Zika cases for the first time.

#### Singapore

Following the detection of a case of Zika virus infection on 27 August 2016, testing was done on 124 people living and working in the Aljunied Crescent and Sims Drive area who were recently or currently symptomatic. Of those, 41 tested positive. As of 1 September, the Ministry of Health reports 115 locally-acquired cases including the first case diagnosed in a pregnant woman. In addition, [media](#) report an imported Zika case in Malaysia in a person who had visited Singapore.

#### Thailand

On 31 August, health authorities in Chiang Mai report seven cases of Zika virus infection in the province. The first case was discovered on 19 June, while the most recent case was on 23 August. Besides Chiang Mai, cases of Zika virus have been documented in other three provinces including Chanthaburi, Phetchabun and Bueng Kan during August 2016.

#### Publications

The US-CDC reported in the Morbidity and Mortality Weekly Report (MMWR) a likely sexual transmission of Zika virus from a man with no symptoms of infection in Maryland. In addition, The Lancet published a case series of the first 1 501 live births with congenital Zika virus syndrome in Brazil and their complete investigation.

### Yellow fever outbreak- Multistate (world) - Monitoring global outbreaks

Opening date: 17 March 2016

Latest update: 2 September 2016

An outbreak of yellow fever in Angola started in December 2015 in the municipality of Viana, Luanda province, and has spread to all 18 provinces of Angola. The outbreak later spread to the neighbouring Democratic Republic of Congo (DRC). Other countries (Brazil, Chad, Colombia, Ghana, Peru and Uganda) have recently reported yellow fever outbreaks or sporadic cases which are not reported as linked to the Angolan outbreak.

→Update of the week

The second meeting of the [Emergency Committee](#) under IHR concerning Yellow Fever concluded that yellow fever does not constitute a Public Health Emergency of International Concern (PHEIC). The Committee noted the concerted efforts and progress made by affected countries and partners to contain the yellow fever outbreaks in Angola and the DRC.

#### *Angola*

According to [WHO](#), the yellow fever epidemic in Angola appears stable, with no new confirmed cases since 23 June and a low number of suspected cases reported over the past month. The number of cases since 5 December is 3 984. Mass reactive vaccination campaigns in Angola have been implemented in areas with confirmed local transmission. In addition, a preventive vaccination campaign targeting approximately three million people in phase I and an additional two million people in phase II, was launched on 15 August.

#### *Democratic Republic of Congo*

No new confirmed cases were reported in the Democratic Republic of Congo (DRC) since 8 August. A preventive vaccination campaign was launched in DRC on 17 August. The campaign is ongoing aiming to immunise over 8 million people in 32 Health Zones in Kinshasa province, and an additional 3 million people in 16 Health Zones on or near the border with Angola. The vaccination campaign in Kinshasa is using the fractionate dose strategy, which is administered at one-fifth of the standard vaccine dose, and is only recommended for use in an emergency situation in the context of limited vaccine availability.

## Cholera - Multistate (World) - Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 2 September 2016

Cholera outbreaks are repeatedly reported from several countries in Africa, Asia and Americas. Currently a major outbreak is affecting Haiti, Ethiopia and the Democratic Republic of Congo.

#### →Update of the week

This week, major cholera outbreaks are reported in Ethiopia and the Democratic Republic of Congo. Also, some cases are reported in two African capitals, Bangui in Central African Republic and Jubba in South Sudan. In addition, a third case of cholera has been reported in South Korea. For more information, please go the specific threat in this CDTR.

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

Opening date: 8 September 2005

Latest update: 2 September 2016

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) by WHO on 5 May 2014 due to concerns regarding the increased circulation and international spread of wild poliovirus during 2014. On 11 August 2016, at the tenth [meeting of the Emergency Committee](#), the temporary recommendations in relation to the PHEIC were extended for another three months. The World Health Organization recently declared wild poliovirus type 2 eradicated worldwide.

#### →Update of the week

Two new cases of wild poliovirus type 1 (WPV1) were reported in the past week in Afghanistan. No new cases of circulating vaccine-derived poliovirus (cVDPV) reported last week. One new WPV1 environmental positive sample was reported in the past week in Pakistan.

## Cholera - Republic of Korea

Opening date: 25 August 2016

Latest update: 2 September 2016

Between 23 and 31 August 2016, three cases of cholera have been detected in the Republic of Korea.

#### →Update of the week

After having reported two cholera cases with the same PFGE profile between 18 and 25 August 2016, the Republic of Korea reported a third case on 31 August 2016. All cases reportedly consumed seafood prior to onset of symptoms.

## II. Detailed reports

### New! Crimean-Congo haemorrhagic fever – Spain - 2016

Opening date: 1 September 2016

Latest update: 2 September 2016

#### Epidemiological summary

The two confirmed cases of Crimean-Congo haemorrhagic fever in Spain are the first reported cases in the country. A 62-year old man died on August 25 in Madrid's Gregorio Marañón University Hospital, having been admitted first to the Infanta Leonor Hospital. The second patient is an intensive care nurse at the first hospital who was infected by the virus whilst caring for the 62-year old man. Two hundred people who have been in contact with the infected patients are being assessed and some confined to their homes.

#### ECDC assessment

No cases of CCHF have been reported in Spain in the past. The origin of the illness in the first case is thought to be tick bite.

CCHF is endemic in the Balkan region. In the EU, Bulgaria regularly reports a small number of cases (six cases in 2010, four in 2011, five in 2012 and eight in 2013) and Greece reported one case in 2008. In the WHO European region, Turkey has been reporting more than 9 000 CCHF cases between 2002 and 2014 and media quoting authorities report 765 cases in 2015.

**Web sources:** [ECDC factsheet](#) | [Regional health authority press release](#) | [media Turkey](#) | [MoH Turkey](#)

### Increase in cases of *Salmonella* Enteritidis MLVA profile 2-9-7-3-2 - multistate - Europe - 2016

Opening date: 4 March 2016

Latest update: 2 September 2016

#### Epidemiological summary

The Netherlands report an increase in cases of *Salmonella* Enteritidis with MLVA-pattern 2-9-7-3-2 since the middle of May 2016 with 64 cases (33 men, 31 women, median age 31, range 0-87 years), compared to 15 cases in 2015. Three cases, living in the same area, have been linked to one restaurant, and the suspected vehicle of infection was egg and/or chicken. The Dutch Food Safety Authority is investigating this link. Further investigation of the increase are ongoing.

Isolates with the same MLVA pattern are reported by Belgium, Norway, Sweden and the United Kingdom. From May 2016 to date, 16 confirmed cases have been reported, belonging to a specific genetic cluster defined by WGS and 131 probable cases characterised by the outbreak MLVA profile. Of these, 24 have a travel history to Austria (1), Czech Republic (1), Germany (1), Greece (13), Poland (7) and France and the Netherlands (1). All cases reported by Norway are travel-associated.

In January 2016, the UK launched an UI-339 related to this MLVA type. As a result, three European countries reported additional cases. Investigations were performed but no source/vehicle was identified. WGS was performed for a set of strains identifying two different WGS subtypes present during the outbreak period both in the UK and the Netherlands. Cases belonging to the genetic clusters involved in the outbreak were identified since February 2012, however a large increase in their number has been recorded since July 2015.

#### ECDC assessment

A multi-country outbreak of *Salmonella* Enteritidis PT8 with MLVA profile 2-9-7-3-2 has been ongoing in the EU since at least July 2015. Six EU/EEA countries have reported 147 *S. Enteritidis* cases either with an identical MLVA profile (n=131) or belonging to a t5 level SNP address cluster (n=16). An international outbreak has been confirmed by high resolution WGS analysis in March 2016 on isolates of the same MLVA type.

#### Actions

ECDC is producing a risk assessment and is liaising with affected countries to harmonise the different national investigations.

### West Nile virus - Multistate (Europe) - Monitoring season 2016

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Opening date: 30 May 2016

Latest update: 2 September 2016

## Epidemiological summary

Since the beginning of the 2016 transmission season and as of 1 September 2016, 63 cases of West Nile fever in humans have been reported in EU Member States and 102 cases in the neighbouring countries.

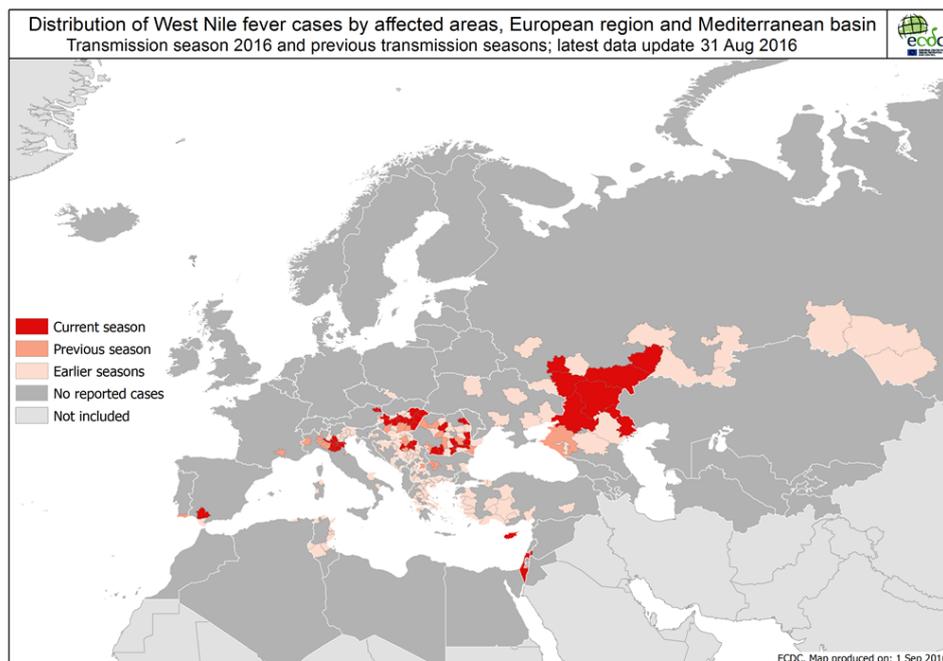
## ECDC assessment

Although there has been a notable peak in West Nile fever transmission in the EU in the past few weeks, the overall number of cases is still within the historical range of values.

## Actions

From week 22 onwards, ECDC produces weekly West Nile fever (WNF) maps during the transmission season to inform blood safety authorities of WNF-affected areas.

ECDC



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

Opening date: 16 November 2015

Latest update: 2 September 2016

### Epidemiological summary

#### EU/EEA imported cases:

Since week 45/2015, 19 countries (Austria, Belgium, the Czech Republic, Denmark, Finland, France, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the UK) have reported 1 569 travel-associated Zika virus infections through [The European Surveillance System \(TESSy\)](#). Over the same time period, seven EU countries reported 79 Zika cases among pregnant women.

#### EU's Outermost Regions and Territories

As of 1 September 2016:

*Martinique*: 35 580 suspected cases have been reported, an increase of 230 since last week. The weekly number of cases is stable.

*French Guiana*: 9 565 suspected cases have been detected, an increase of 26 cases since last week. The weekly number of cases is stable.

*Guadeloupe*: 29 075 suspected cases have been detected, an increase of 405 suspected cases since last week. The weekly number of cases continues to decrease.

*St Barthélemy*: 595 suspected cases have been detected, an increase of 55 suspected cases since last week. The weekly number of cases has been decreasing during the past two weeks.

*St Martin*: 2 085 suspected cases have been detected, an increase of 95 suspected cases since last week. The weekly number of cases has been slightly increasing during the past week.

#### The USA

Five new autochthonous cases have been reported in Florida since the last CDTR, bringing the number of locally-transmitted cases to 47. As of 1 September, the number of autochthonous cases reported in Florida state is as follows: 40 cases in Miami-Dade, one in Broward, three in Palm Beach and one in Pinellas. The department is currently conducting an investigation into the other two cases to determine where exposure occurred.

#### Update on microcephaly and/or central nervous system (CNS) malformations potentially associated with Zika virus infection

As of 1 September 2016, microcephaly and other central nervous system (CNS) malformations associated with Zika virus infection or suggestive of congenital infection have been reported by 20 countries or territories. Brazil reports the highest number of cases. Eighteen countries and territories worldwide have reported an increased incidence of Guillain-Barré syndrome (GBS) and/or laboratory confirmation of a Zika virus infection among GBS cases.

Since February 2016, 11 countries have reported evidence of person-to-person transmission of Zika virus, probably via a sexual route.

In the EU, Spain (2) and Slovenia (1) have reported congenital malformations associated with Zika virus infection after travel in the affected areas. Cases have also been detected in the EU's Outermost Regions and Territories in Martinique, French Guiana and French Polynesia.

**Web sources:** [ECDC Zika Factsheet](#) | [PAHO](#) | [Colombian MoH](#) | [Brazilian MoH](#) | [Brazilian microcephaly case definition](#) | [SAGE MOH Brazil](#) | [Florida Health department](#)

### ECDC assessment

The spread of the Zika virus epidemic in the Americas is likely to continue as the vectors (*Aedes aegypti* and *Aedes albopictus* mosquitoes) are widely distributed there. The likelihood of travel-related cases in the EU is increasing. A detailed risk assessment is available [here](#). As neither treatment nor vaccines are available, prevention is based on personal protection measures. Pregnant women should consider postponing non-essential travel to Zika-affected areas.

### Actions

ECDC publishes an [epidemiological update](#) every Friday together with [maps](#) containing information on countries or territories which have reported confirmed autochthonous cases of Zika virus infection. A Zika virus infection atlas is also available on the ECDC [website](#). ECDC published an updated [Rapid Risk Assessment](#) on 30 August 2016.

ECDC publishes information concerning vector distribution on the [ECDC website](#), showing the distribution of the vector species at 'regional' administrative level (NUTS3).

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## Yellow fever outbreak- Multistate (world) - Monitoring global outbreaks

Opening date: 17 March 2016

Latest update: 2 September 2016

### Epidemiological summary

#### Angola

According to the latest WHO situation report from 26 August, Angola reports 62 more suspected cases of yellow fever since the previous week bringing the number of suspected cases to 3 984 including 369 deaths (CFR 9.2%). There have been no new confirmed cases since 23 June.

#### Democratic Republic of Congo

Since the start of the year and as of 25 August 2016, the Democratic Republic of Congo (DRC) has reported 2 410 suspected cases from eight of 26 provinces. Of the 75 confirmed cases thirteen are autochthonous. Vaccination campaigns are ongoing.

**Web sources:** [ECDC factsheet /WHO yellow fever page](#) | [WHO AFRO](#) | [WHO-DRC](#) | [PAHO](#) | [MoH Peru](#) | [ECDC updated risk assessment](#) | [DRC Health Cluster bulletin](#) | [PAHO update 26 July](#) |

### ECDC assessment

The outbreak in **Angola** appears to be declining, with no new confirmed cases in the last six weeks. The geographical extent of the outbreak in **DRC** continues to increase. Areas at greatest risk are those with *Aedes spp* present, low population immunity and high population mobility. The rainy season is due to begin in September, and will increase the risk of vector borne transmission. This will also reduce accessibility to remote areas, including provinces that border Angola.

### Actions

ECDC published new [mosquito maps](#) on 3 August showing the geographical distribution of *Aedes* mosquitoes in Europe.

ECDC published an updated [risk assessment](#) on 14 July 2016.

ECDC published a [report on the assessment of yellow fever in Angola](#) on 5 July 2016.

An [EU mobile lab](#) has been deployed in the DRC under the European Medical Corps since 19 July 2016.

## Cholera - Multistate (World) - Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 2 September 2016

### Epidemiological summary

#### African region

##### ***Ethiopia***

As of 18 August, nationwide, nearly 12 000 cases were reported in 208 affected woredas, with 58 per cent of cases being in Addis Ababa. With the current peak of the rainy season in August, subsequent flooding, and continued population movement, including mass gatherings for national and religious holidays, there is a high risk that the outbreak may continue to spread with considerable speed. Humanitarian partners are working with the Federal Ministry of Health to prioritise an acute watery diarrhea (AWD) response to support the Government of Ethiopia's AWD response plan.

##### ***Central Africa republic (CAR)***

According to ACAPS, as of 21 August, authorities reported 166 cholera cases, including 19 deaths in CAR. The first case was reported on 27 July along Oubangui river 100 km north to Bangui. Since then cases have been reported in Damara sub prefecture and in Bangui. South Sudan Source:

[http://reliefweb.int/sites/reliefweb.int/files/resources/160722\\_OCHA\\_SouthSudan\\_humanitarian\\_bulletin10.pdf](http://reliefweb.int/sites/reliefweb.int/files/resources/160722_OCHA_SouthSudan_humanitarian_bulletin10.pdf) As of 21 July, 162 cholera cases and seven deaths have been reported in South Sudan, this figure includes 133 cases and 3 deaths reported in the capital Juba,

##### ***Republic democratic of Congo (DRC)***

According to the International Federation of the Red Cross (IFRC), 16 860 cholera cases, including 446 deaths have been reported

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between week 1 and 32 in 2016. Among these cases, 539 were reported during 32. Equateur remains the province with the highest transmission rate.

### ***Somalia***

According to UNICEF, 13 055 cholera cases, including 491 deaths has been reported from the beginning of the year to the end of July 2016. Children represent 58% of all cases.

### ***Other countries***

In August, Benin, Ghana and Liberia also reported cases.

### **Asia**

#### ***Nepal***

According to the media, between 30 June and 30 August, 119 cholera cases have been reported. Among these cases, 29 were reported last week. Of these 119 cases, 101 were reported from Lalitpur and 13 from Kathmandu.

### **Americas**

#### ***Haiti***

The Ministry of Health reported 3 197 cases, including 18 deaths for the month of July, and 1 719 cases, including 7 deaths for the three first weeks of August 2016. According to the official daily report, 788 750 cases have been notified since the first case in 2010. Among these cases, 9 381 have died (CFR=1.2%).

## **Actions**

ECDC continues to monitor cholera outbreaks globally through its epidemic intelligence activities to identify significant changes in epidemiology and will report on a monthly base.

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

Opening date: 8 September 2005

Latest update: 2 September 2016

### **Epidemiological summary**

In 2016, 23 cases of wild poliovirus type 1 (WPV1) have been reported so far, compared with 37 for the same period in 2015. The cases were detected in Pakistan (13), Afghanistan (8) and Nigeria (2). As of 25 August 2016, three cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO in 2016, all from Laos. There were 14 cVDPV cases during the same period in 2015.

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

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

## Cholera - Republic of Korea

Opening date: 25 August 2016

Latest update: 2 September 2016

### Epidemiological summary

On 18 August, a 59-year-old man was diagnosed with cholera in South Korea. The patient had no recent travel history outside of South Korea. The case was from Gwangju city in South Jeolla Province. Laboratory results were positive for *V. cholerae* serogroup O1, biotype El Tor.

On 25 August, South Korean authorities acknowledged a second cholera case. The case is a 73-year-old female with underlying conditions. The investigation showed that the infection was caused by a *V. cholerae* strain of serogroup O1, biotype El Tor. The case was reported in South Gyeongsang Province. On 31 August, a 67-year-old man from South Gyeongsang Province was diagnosed with cholera. All three cases had eaten seafood prior to onset of symptoms and the authorities informed that the *V. Cholerae* from the three cases have the same PFGE profile. Prior to the cases reported in August 2016, the last locally-acquired cholera cases in the Republic of Korea were reported in 2002 and in 2001, when 142 autochthonous cases were reported in South Korea (data GIDEON)

**Source:** [Korean CDC](#), [media](#)

### ECDC assessment

As the preliminary investigation are in favour of contaminated seafood distributed in restaurants, occurrence of further cases cannot be ruled out. Health authorities have implemented control measures.

### Actions

ECDC monitors this event through epidemic intelligence.

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