

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

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

Opening date: 2 October 2015

Latest update: 23 March 2016

Influenza transmission in Europe shows a clear seasonal 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 11/2016, influenza was still widespread in countries across the western part of the European Region, but the majority of countries (82%) reported decreasing or stable trends. While the proportion of sentinel specimens testing positive for influenza virus remained high, at 49% in week 11/2016, the total sentinel influenza virus detections has been decreasing since week 8/2016. There is a shift towards influenza virus type B circulation, this is most prominent in sentinel sources: 66% of detections were influenza virus type B. The proportion of influenza virus type B detections in hospitalised cases ranged between 20-45%, indicating that influenza virus type A was most often detected in severe cases. The number of cases of severe disease was lower than in previous weeks but varied between countries. Most severe cases were associated with A(H1N1)pdm09 infection and were in people aged 15-64 years.

#### Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 23 March 2016

Measles, a highly transmissible vaccine-preventable disease, is still endemic in some EU countries where vaccination uptake remains below the level required to interrupt the transmission cycle. Elimination of measles requires consistent vaccination uptake above 95% with two doses of measles vaccine in all population groups, strong surveillance and effective outbreak control measures. In 2014, 16 EU/EEA countries were above the measles vaccination coverage target of 95% for the first dose, and six countries for the second dose. Fourteen countries have coverage rates of <95% for the first dose and 20 countries for the second dose.

##### →Update of the week

New outbreaks have been detected in the EU/EEA in Romania, Italy and the United Kingdom since the last monthly update.

In the rest of the world, outbreaks were reported in Mali, Niger, Nigeria, Liberia and Mongolia.

## Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 23 March 2016

Rubella, caused by the rubella virus and commonly known as German measles, is usually a mild and self-limiting disease which often passes unnoticed. The main reason for immunising against rubella is the high risk of congenital malformations associated with rubella infection during pregnancy. All EU Member States recommend vaccination against rubella with at least two doses of vaccine for both boys and girls. The vaccine is given at the same intervals as the measles vaccine as part of the MMR vaccine. No new outbreaks have been detected in the EU since June 2015.

→Update of the week

No new outbreaks have been detected in EU Member States since the last monthly update.

In the rest of the world, there is an on-going outbreak in Mongolia.

## Haemolytic uraemic syndrome (HUS) cases in young children – Romania

Opening date: 16 February 2016

Latest update: 23 March 2016

As of 23 March 2016, the Ministry of Health in Romania has reported 19 confirmed cases in an outbreak of Shiga-toxin-producing *Escherichia coli* (STEC) O26. Of these 19 cases, 16 had haemolytic uraemic syndrome (HUS). Three of the cases have died. On 15 March, the Ministry of Health in Italy reported one case of HUS in a 14 month-old-child of Romanian origin. The epidemiological investigation suggests a single source which has not yet been identified.

→Update of the week

There has been no update since 19 March.

## Fatal case of diphtheria in unvaccinated child - Belgium -2016

Opening date: 17 March 2016

Latest update: 23 March 2016

On 15 March 2016, a fatal case of toxigenic diphtheria caused by *Corynebacterium diphtheriae* was reported in Belgium in an unvaccinated child.

→Update of the week

Throat swabs collected from parents and siblings of the case tested negative for diphtheria. Preliminary results from the screening of the healthcare personnel (N=15) and school children who came into contact with the case (N=26) indicate they were all negative for diphtheria.

## Non EU Threats

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

Opening date: 16 November 2015

Latest update: 23 March 2016

Since the beginning of 2014, autochthonous Zika cases have been reported in the Pacific region. In addition, autochthonous transmission of Zika virus has been reported in Brazil since April 2015. As of 23 March 2016, 45 countries and territories have reported autochthonous cases of Zika virus infection during the past nine months. Links between Zika virus infection in pregnancy and microcephaly of the foetus have been under investigation since October 2015, when the Brazilian Ministry of Health reported an unusual increase in cases of microcephaly following the Zika virus outbreak in the north-eastern states. French Polynesia reported an increase in cases of central nervous system malformations during an outbreak of Zika virus in 2014–2015. Since 1 February 2016, Zika virus infection and the clusters of microcephaly cases and other neurological disorders constitute a PHEIC. Considering the growing body of evidence of adverse pregnancy outcomes associated with Zika virus infection, ECDC recommends that pregnant women postpone non-essential travel to Zika-affected areas.

→Update of the week

Since last week, one new country, **Vietnam**, has reported autochthonous transmission. According to a press release by the [Ministry of Health](#), Zika virus infection was diagnosed in an Australian traveller who had visited Vietnam between 26 February and 6 March 2016.

**Madeira:** On 22 March, [local health authorities](#) in Madeira reported two imported cases of Zika virus infection from Brazil. One of the cases is under investigation for potential sexual transmission.

**Martinique:** [Media](#) quoting the Ministry of Health, reported a suspected case of microcephaly linked with Zika virus infection.

**Panama:** On 18 March, the [Ministry of Health](#) reported a case of Zika congenital syndrome in a newborn who died on 17 March.

### Update on the observed increase of congenital Zika syndrome and other neurological complications

So far only French Polynesia and Brazil have reported an increase in Zika congenital syndrome.

**Brazil:** According to the [Ministry of Health](#), since October 2015 and as of 19 March 2016, there have been 6 671 suspected cases of microcephaly from 1 266 municipalities across Brazil. This is an increase of 191 suspected cases since the last weekly update on 12 March. As of 19 March 2016, 907 of the cases have been confirmed to have microcephaly and/or other central nervous system findings suggestive of congenital infection. Of these cases, 122 have been confirmed positive for Zika virus by PCR.

There have been 198 intrauterine or neonatal deaths reported among children notified to have microcephaly and/or central nervous system malformations. Of these, 46 cases were confirmed to have microcephaly and/or central nervous system malformations. One hundred and thirty cases are still under investigation and 22 cases have been discarded.

**USA:** On 21 March, [WHO](#) reported two cases of Guillain-Barre syndrome (GBS) with confirmed Zika virus infection in the USA. This is the first time that a country with no vector-borne transmission of Zika virus has detected patients with concomitant GBS and Zika virus infection.

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

Opening date: 8 September 2005

Latest update: 23 March 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) on 5 May 2014 due to concerns regarding the increased circulation and international spread of wild poliovirus during 2014. On 25 November 2015, the Temporary Recommendations in relation to the PHEIC were extended for another three months. WHO recently declared wild poliovirus type 2 eradicated worldwide. The type 2 component of the oral polio vaccine is no longer needed and there are plans for a globally synchronised switch in April 2016 from the trivalent to bivalent oral polio vaccine which no longer contains type 2.

→Update of the week

During the past week, there were no new wild poliovirus type 1 (WPV1) cases or cases of circulating vaccine-derived poliovirus reported to WHO.

## Outbreak of yellow fever - Angola - 2016

Opening date: 17 March 2016

Latest update: 23 March 2016

There is an ongoing outbreak of yellow fever in Angola that started in December 2015 in the municipality of Viana, Luanda province. Yellow fever is endemic in Angola, however, this is the first outbreak reported since 1988. An immunisation campaign is ongoing.

→Update of the week

Since the initial cases were detected in Luanda province, there has been a rapid increase in the number of suspected cases recorded since mid-January 2016. Local transmission is no longer restricted to Luanda. As of 21 March, 16 of 18 provinces across the country have reported suspected cases. According to WHO, 17 laboratory-confirmed locally-acquired cases have been detected in 10 districts of six provinces outside Luanda.

To date, at least 1 132 suspected cases have been reported nationally, including 168 deaths. Of these cases, 375 are laboratory-confirmed. Transmission continues in Luanda and it remains the most affected province with 818 cases (281 confirmed confirmed), including 129 deaths. The number of cases from provinces other than Luanda is reported to be increasing

## Lassa fever - Germany ex Togo - 2016

Opening date: 17 March 2016

Latest update: 23 March 2016

On 10 March 2016, Germany reported a fatal case of Lassa fever in an American doctor who had been medically evacuated from Togo. On 17 March 2017, the Robert Koch Institute (RKI) reported a second laboratory-confirmed case of Lassa fever in a funeral home employee who had handled the corpse of the first imported case. On 11 March 2016, another American medical worker working with an NGO in Togo was medically evacuated from Togo to the USA. An outbreak of Lassa fever is currently ongoing in Nigeria and in neighbouring Benin. This is the first time that Lassa fever has been diagnosed in cases exposed in Togo.

→Update of the week

No new secondary cases have been reported during the past week.

## Ebola Virus Disease Epidemic - West Africa - 2014 - 2016

Opening date: 22 March 2014

Latest update: 23 March 2016

The largest ever epidemic of Ebola virus disease (EVD) affected West Africa from December 2013 to January 2016, 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 16 March 2016, WHO has reported 28 603 cases of Ebola virus disease related to the outbreak in West Africa, including 11 301 deaths. The number of cases in the most affected countries peaked in autumn 2014 and has been slowly decreasing since then. Sierra Leone was declared Ebola-free by WHO on 7 November 2015, Guinea on 29 December 2015 and Liberia on 14 January 2016. On 15 January 2016, WHO reported a new sporadic case in Sierra Leone, and on 20 January, a second case, epidemiologically linked to the previous one. On 17 March 2016, WHO declared the end of the recent sporadic transmission of Ebola virus disease in Sierra Leone, 42 days after the last person confirmed to have Ebola virus disease in the country tested negative for the second time.

→Update of the week

A new Ebola cluster has been detected in Guinea. As of 22 March, [WHO](#) reports five Ebola deaths (three probable and two confirmed) in the prefectures of N'Zérékoré and Macenta. More than 800 contacts have been identified. Local health authorities have reactivated the emergency coordination mechanism.

## II. Detailed reports

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

Opening date: 2 October 2015

Latest update: 23 March 2016

#### Epidemiological summary

This season influenza A(H1N1)pdm09 viruses have predominated in most countries in the European Region, although in the last few weeks there has been a shift to influenza virus type B circulation. Influenza activity, based on laboratory-confirmed mild and severe cases in sentinel and non-sentinel sources, has peaked at weeks 5-7/2016. The first affected countries were generally located in the eastern part of the Region. For the countries in the eastern part of the region reporting SARI cases, the number of severe cases peaked several weeks earlier (i.e. in week 2 and 3 in Armenia and Ukraine respectively). Data from the 17 countries or regions reporting to the European monitoring of excess mortality for public health action project (EuroMOMO) suggest a pattern of excess all-cause mortality among those aged 15–64 years since the end of 2015. This is similar to the 2012–2013 winter season and slightly lower than the 2014–2015 winter season. Mortality among elderly people is within the expected levels for this season.

#### ECDC assessment

Most of the viruses antigenically and/or genetically characterised so far have been similar to those recommended for inclusion in the trivalent or quadrivalent vaccines for this season in the northern hemisphere. There are no indications among the majority of currently circulating seasonal influenza viruses of reduced susceptibility to neuraminidase inhibitors oseltamivir or zanamivir.

Recommendations on the seasonal influenza vaccine composition for the 2016–2017 season in the northern hemisphere call for replacement of the A(H3N2) component with a more recent virus and inclusion of a B/Victoria-lineage virus in the trivalent vaccine.

#### Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its report weekly on the [Flu News Europe website](#). Season risk assessments are available from [ECDC](#) and [WHO](#).

### Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 23 March 2016

#### Epidemiological summary

##### EU Member States

###### *Romania*

An outbreak of measles was reported in the north district of Bistrita- Nasaud at the end of January 2016. Cases have occurred in communities with suboptimal vaccination coverage. As of 14 March 2016, 62 measles cases were notified, of which 25 were laboratory confirmed. Measles genotype B3 was identified. Most cases occurred in children within 1-4 years age group (22 (35,5%). As of 14 March 2016, 114 children have been immunised in the affected area.

###### *Italy*

Local media report an outbreak in unvaccinated adults aged 20-35 years in the Milan area which has been going on since October 2015. Nearly half of the cases needed hospitalisation. In Parma, there have been 11 cases recorded in recent weeks.

###### *The UK*

Between the beginning of February and 11 March, Public Health England reported 20 cases of measles across the country with many admitted to hospital. The 20 cases – almost all in the South East – occurred predominantly in unimmunised adolescents and young adults aged 14-40

##### Rest of the world

##### Africa

### *Nigeria*

[Media](#) reported an outbreak of measles at the end of February in Sokoto with over 300 cases including 20 fatalities. Another outbreak was [reported](#) in March in Jigawa state with 249 cases and six deaths in children under five.

### [Mali](#)

An outbreak was reported at the beginning of March in Tin-Essako (Kidal Region) et Macina (Ségou Region)

### [Niger](#)

On 8 March 2016, UNHCR reported several outbreaks in refugee camps in Niger involving Malian refugees.

### [Liberia](#)

A measles outbreak has been reported in north-western Liberia in Margibi county that started at the beginning of March. There are currently 33 suspected cases, 26 of which have been confirmed, including at least six deaths.  
<http://en.starafrika.com/news/liberia-measles-outbreak-reported-in-north-western-liberia.html>

## **Asia**

### *Mongolia*

According to a media report in March, more than 10 children have died in a measles outbreak in Mongolia involving more than 3 200 cases.

## **Publication**

[Measles outbreak in a refugee settlement in Calais, France: January to February 2016](#)

**Web sources:** [ECDC measles and rubella monitoring](#) | [ECDC/Euronews documentary](#) | [MedISys Measles page](#) | [EUVAC-net ECDC](#) | [ECDC measles factsheet](#)

## **ECDC assessment**

During the 12-month period from December 2014 to November 2015, 4 111 cases of measles were reported by 30 EU/EEA countries. Twenty-nine countries reported consistently throughout this period. Germany, France, Austria, Croatia and Italy accounted for the majority of cases. In 14 of the countries reporting consistently, the measles notification rate was less than the elimination target of one case per million population, including eight countries which reported zero cases during the 12-month period.

Measles is targeted for elimination in Europe. Elimination is defined as the absence of endemic cases in a defined geographical area for a period of at least 12 months, in the presence of a well-performing surveillance system. Regional elimination can be declared after 36 or more months of the absence of endemic measles or rubella in all Member States.

Although progress has been made towards elimination, this goal has not yet been achieved. At the third [meeting](#) of the Regional Verification Commission for measles and rubella in November 2014, based on country reports using 2013 data, 14 EU/EEA countries were declared to have interrupted measles transmission, five of which were classified as at risk of the re-establishment of endemic transmission. Eight countries were classified as still having endemic transmission and seven countries were classified as inconclusive.

## **Actions**

ECDC monitors measles transmission and outbreaks in EU and neighbouring countries in Europe on a monthly basis through enhanced surveillance and epidemic intelligence activities.

## **Rubella - Multistate (EU) - Monitoring European outbreaks**

Opening date: 7 March 2012

Latest update: 23 March 2016

## **Epidemiological summary**

No new outbreaks have been detected in the EU since June 2015.

[Media](#), quoting the National Center of Infectious Diseases (NCID), report an outbreak rubella involving 9 383 cases nationwide in Mongolia.

**Web sources:** [ECDC measles and rubella monitoring](#) | [ECDC rubella factsheet](#) | [WHO epidemiological brief summary tables](#) | [WHO epidemiological briefs](#) | [Progress report on measles and rubella elimination](#) | [Towards rubella elimination in Poland](#)

### ECDC assessment

The WHO has targeted the elimination of measles and rubella in the 53 Member States of the WHO European Region. Elimination is defined as the absence of endemic cases in a defined geographical area for a period of at least 12 months, in the presence of a well-performing surveillance system. Regional elimination can be declared after 36 or more months of the absence of endemic measles or rubella in all Member States. Although progress has been made towards elimination, this goal has not yet been achieved. At the third [meeting](#) of the Regional Verification Commission for measles and rubella in November 2014, based on country reports on 2013 data for rubella, 16 EU/EEA countries were declared to have interrupted endemic transmission, six of which were classified as at risk of re-establishment. Eight countries were classified as still having endemic transmission and five countries were classified as inconclusive.

### Actions

ECDC closely monitors rubella transmission in Europe by analysing the cases reported to the European Surveillance System and through its epidemic intelligence activities on a monthly basis. Twenty-four EU and two EEA countries contribute to the enhanced rubella surveillance. The purpose of the enhanced rubella monitoring is to provide regular and timely updates on the rubella situation in Europe in support of effective disease control, increased public awareness and the achievement of the 2015 rubella and congenital rubella elimination target.

## Haemolytic uraemic syndrome (HUS) cases in young children – Romania

Opening date: 16 February 2016

Latest update: 23 March 2016

### Epidemiological summary

The Ministry of Health in Romania reported an outbreak of HUS involving 19 children aged 5 to 38 months. Sixteen have been hospitalised for HUS and three have died. In addition, a suspect case is currently under investigation. Following initial environmental investigations, *E. coli* O26 has been identified in soft cheese samples produced by a local company that sells traditional dairy items in Arges district. The factory has been closed and the product is no longer available on the market. The cheese is reported to also have been distributed to Germany, while cheese products from the same company have been exported to Belgium and Spain. An additional case was reported in Italy.

**Web sources:** [Ministry of Health Romania](#) ; [Ministry of Health Italy](#)

### ECDC assessment

This is an outbreak of STEC O26 confirmed through serology. The epidemiological investigation suggests a single source. The microbiological information confirmed that 11 of 20 cases in Romania and Italy were positive for O26; however, it was inconclusive in identifying one single outbreak strain. The molecular information available from the human and food isolates does not provide sufficient evidence towards a single strain outbreak. Romanian and Italian authorities continue collecting information from epidemiological, microbiological and environmental investigations in order to identify the source and to control this outbreak.

### Actions

A joint rapid outbreak assessment (ROA) with EFSA is being prepared.

## Fatal case of diphtheria in unvaccinated child - Belgium -2016

Opening date: 17 March 2016

Latest update: 23 March 2016

7/13

## Epidemiological summary

A case of diphtheria was confirmed on 15 March in Antwerp, Belgium in a 3-year-old unvaccinated child. The National Reference Centre in Belgium has confirmed the case. The symptoms started on 6 March and she was admitted to an intensive care unit on 11 March. As there is no stockpile of diphtheria anti-toxin (DAT) in Belgium, ECDC mediated the procurement of DAT when contacted by the Scientific Institute of Public Health on 16 March 2016. RIVM in the Netherlands supplied the anti-toxin the same day, however despite administration of DAT, the three-year-old child died on 17 March.

**Web source:** [Belgian Care and health website \(Zorg en Gezondheid\)](#) |Media

## ECDC assessment

The diphtheria case in Belgium does not currently represent a serious cross-border threat to health in the EU but is a matter of concern in light of the limited availability of DAT across the EU/EEA Member States. Early administration of the antitoxin may prevent unfavourable clinical outcomes.

Exposure of unvaccinated individuals to carriers of the pathogen is not unexpected, as vaccination does not prevent carriage of the pathogen. Diphtheria is effectively prevented by vaccination.

## Actions

ECDC has prepared a risk assessment.

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

Opening date: 16 November 2015

Latest update: 23 March 2016

## Epidemiological summary

As of 23 March, no autochthonous Zika virus transmission has been reported in the continental EU. ECDC is collecting data regarding imported cases through the media and official government communication lines. As of 23 March 2016, ECDC has recorded 302 imported cases in 17 EU/EEA countries. In addition, one confirmed case has been published following diagnosis in a Slovenian hospital. Nineteen cases are among pregnant women.

Several of the EU's Outermost Regions and Territories continue to report autochthonous transmission:

**Martinique:** From December 2015 to 24 March 2016, 14 320 suspected cases have been reported, an increase of 1 760 during the past week.

**French Guiana:** From December 2015 to 24 March 2016, 2 770 suspected and 210 laboratory-confirmed cases have been reported, an increase of 516 suspected and 15 laboratory-confirmed cases during the past week.

**Guadeloupe:** As of 10 March 2016, 794 suspected and 134 laboratory-confirmed cases have been reported, an increase of 44 suspected and 30 laboratory-confirmed cases during the past week.

**Saint Martin:** As of 10 March, 154 suspected and 10 laboratory-confirmed cases have been reported, this is an increase of 30 suspected and 6 laboratory-confirmed cases during the past week.

As of 24 March 2016, six countries have reported locally acquired infection in the absence of any known mosquito vectors, probably through sexual transmission: Argentina, France, Italy, New Zealand, Portugal (the Autonomous Region of Madeira) and the United States of America.

As of 23 March 2016, several countries or territories have reported confirmed autochthonous cases of Zika virus infection in the past nine months: American Samoa, Aruba, Barbados, Bolivia, Brazil, Bonaire, Cape Verde, Colombia, Costa Rica, Cuba, Curaçao, Dominica, Dominican Republic, Ecuador, El Salvador, Fiji, French Guiana, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Marshall Islands, Martinique, Mexico, New Caledonia, Nicaragua, Panama, Paraguay, Philippines, Puerto Rico, Saint Martin, Saint Vincent and the Grenadines, Samoa, Sint Maarten, Solomon Islands, Suriname, Thailand, Tonga, Trinidad and Tobago, Vanuatu, Venezuela, Vietnam and the US Virgin Islands.

**Web sources:** [ECDC Zika Factsheet](#) | [WHO DON](#) | [PAHO](#) | [Colombian MoH](#) | [Brazilian MoH](#) | [Brazilian microcephaly case definition](#)

## ECDC assessment

There is growing evidence that transplacental infections with Zika virus can cause severe central nervous system damage and microcephaly. Several studies have documented steps in the chain of an intrauterine infection, from symptomatic Zika-like infection in a pregnant mother residing in a Zika-affected area, to detection of microcephaly with brain calcifications in the foetus, and detection of Zika virus either in the amniotic fluid, in the cerebrospinal fluid of the newborn, or in the central nervous system of an aborted foetus or a dead newborn. However, a causal link between intrauterine Zika virus infection and adverse pregnancy outcomes has not yet been firmly confirmed.

The magnitude of the risk that Zika virus infection during pregnancy will result in malformations in the foetus is under investigation, but remains unknown at present.

Considering the growing body of evidence of adverse pregnancy outcomes associated with Zika virus infection, ECDC recommends that pregnant women postpone non-essential travel to Zika-affected areas. In addition, in order to protect pregnant women, male travellers returning from affected areas should consider using a condom with a pregnant partner until the end of pregnancy, or for six months with partners at risk of getting pregnant. This precautionary advice is based on limited evidence and will be revised as more information becomes available.

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.

With the spread of the Zika virus, the likelihood of travel-related cases in the EU is increasing. As neither treatment nor vaccines are available, prevention is based on personal protection measures similar to those that are applied against dengue and chikungunya infections.

## Actions

ECDC publishes an [epidemiological update](#) every Friday and [maps](#) with information on countries or territories which have reported confirmed autochthonous cases of Zika virus infection.

ECDC published an update of the [rapid risk assessment](#) on 9 March 2016 and has updated the [ECDC Zika page](#) with [Frequently Asked Questions](#).

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

Opening date: 8 September 2005

Latest update: 23 March 2016

### Epidemiological summary

In 2016, seven cases of wild poliovirus type 1 (WPV1) have been reported, compared with 21 cases for the same period in 2015. The cases were detected in Pakistan (six cases) and in Afghanistan (one case).

As of 24 March 2016, three cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO in 2016, all from Laos.

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

## Outbreak of yellow fever - Angola - 2016

Opening date: 17 March 2016

Latest update: 23 March 2016

### Epidemiological summary

The international spread of yellow fever cases from Angola has already been documented with imported cases identified among returning travellers in China, Kenya and the Democratic Republic of Congo (DRC). As of 22 March, China has reported five imported cases in Beijing (4) and Shanghai (1). According to media, one fatal imported case of yellow fever has been reported in Mauritania.

According to Chinese media, the Chinese Embassy in Angola has issued an alert regarding the need for vaccination against yellow fever, stating that at least six Chinese citizens have so far died of yellow fever in Angola in 2016.

Several yellow fever cases have been reported in expatriates residing in Angola (nationals of Eritrea, Congo, Cape Verde, Lebanon and India).

A mass vaccination campaign has been ongoing since February aiming to immunise 6.7 million people in Luanda province. According to a WHO situation report, as of 14 March 2016, administrative data indicate a vaccination coverage of 80% for the whole province of Luanda.

Web sources: [ECDC factsheet](#) / [WHO yellow fever page](#) | [WHO DON](#)

### ECDC assessment

Yellow fever is caused by a *Flavivirus* which is transmitted to humans by the bites of infected *aedes* mosquitoes. Yellow fever is an acute viral haemorrhagic disease. Vaccination is the most important preventive measure against yellow fever.

Yellow fever in an urban setting is a public health emergency that may result in a large number of cases. Therefore, additional cases in unvaccinated populations related to this urban outbreak should be expected, until a sufficient proportion of the susceptible population is vaccinated. The competent vector for yellow fever, the *aedes* mosquito, is not present in continental Europe. The *aedes aegypti* mosquito is present in the island of Madeira, however, the season is currently not suitable for mosquito activity.

Very few cases of imported yellow fever have been reported in Europe. One fatal case occurred in Belgium in 2001 in a traveller returning from a short trip to Gambia. Another fatal case was reported in 1999 in Germany in a traveller returning from a three-week trip to Ivory Coast. Outbreaks of yellow fever have never been reported in Asia, but local conditions with widespread distribution of *Aedes aegypti*, the main vector of urban yellow fever in Africa and in South America, are suitable for urban yellow fever outbreaks. There is a large Asian community in Africa and the first case of imported yellow fever in Asia coming from an area with on-going transmission is a reminder that tourists visiting and foreign residents living in affected countries should be

vaccinated against yellow fever.

Proof of vaccination is required for all travellers aged 1 year and above entering Angola. The US-CDC recommends vaccination of all travellers aged 9 months or older. European citizens travelling to Angola should consult their national health authorities' recommendations regarding yellow fever vaccination, which should be administered at least 10 days before travelling.

## Actions

ECDC published a [rapid risk assessment](#) on 25 March 2016.

## Lassa fever - Germany ex Togo - 2016

Opening date: 17 March 2016

Latest update: 23 March 2016

### Epidemiological summary

Lassa fever is known to be endemic in Guinea, Liberia, Mali, Sierra Leone, Benin and parts of Nigeria. The disease is thought to exist in other West African countries as well. The number of Lassa virus infections per year in West Africa is estimated at 100 000 to 300 000, with approximately 5 000 deaths. The two evacuated patients are the only confirmed cases reported so far in Togo. The cases worked in Oti district, 600 km north from the capital, Lome. These are the first known cases of Lassa fever in the country.

Web sources: [RKI](#) | [ECDC factsheet](#) | [WHO](#) | [Emory Hospital](#) | [US media](#)

### ECDC assessment

Lassa fever is an acute viral haemorrhagic fever illness with an incubation period of 6 to 21 days. The Lassa virus is transmitted to humans via contact with food or household items contaminated with urine or faeces of the main reservoir, the multimammate mouse. Person-to-person infections and laboratory transmission can also occur, particularly in hospitals lacking adequate infection prevention and control measures. About 80% of people who become infected with Lassa virus have no symptoms. The overall case-fatality rate is 1%.

Lassa fever cases have been imported from West Africa to the USA, Germany, the UK and the Netherlands previously and are therefore not unexpected. These two recent cases imported to the USA and Germany respectively are unusual as there is no known ongoing outbreak in Togo. Secondary transmission has not been reported before in Europe. It is not yet known how the second person in Germany got infected. Investigations are ongoing in Germany regarding the circumstances of the secondary transmission.

## Actions

On 24 March 2016, ECDC posted a [rapid risk assessment](#).

## Ebola Virus Disease Epidemic - West Africa - 2014 - 2016

Opening date: 22 March 2014

Latest update: 23 March 2016

### Epidemiological summary

An [epi-update](#) was published about the new Ebola cluster in Guinea on 23 March 2016.

Official WHO figures are still from 16 March 2016:

- **Liberia:** 10 675 cases, including 4 809 deaths. Liberia was declared EVD-free on 3 September 2015. However, a family

cluster occurred in the week leading up to 22 November 2015.

- **Sierra Leone:** 14 124 cases, including 3 956 deaths. The country was declared EVD-free on 7 November 2015. However, two epidemiologically linked sporadic cases were reported on 14 and 20 January 2016.
- **Guinea:** 3 804 cases including 2 536 deaths.

Seven countries have reported an initial case or localised transmission: Nigeria, Senegal, the USA, Spain, Mali, the UK and Italy.

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

The detection of new cases in Sierra Leone in January 2016 and Guinea in March 2016 is not unexpected and highlights the importance of maintaining heightened surveillance in the coming months as the risk of additional small outbreaks remains. Sporadic cases have been identified previously and are likely to be the result of the virus persisting in survivors even after recovery.

## Actions

In 2015, ECDC deployed 95 experts (on a rotating basis) from within and outside the EU in response to the Ebola outbreak. This included an ECDC-mobilised contingent of experts to Guinea.

On 16 October 2015, ECDC published the latest (13th) update of the [rapid risk assessment](#).

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](#).

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