

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Monitoring environmental suitability of *Vibrio* growth in the Baltic Sea – Summer 2019

Opening date: 3 June 2019

Latest update: 13 September 2019

Elevated sea surface temperatures (SST) in marine environments with low salt content offer optimal environmental growth conditions for certain *Vibrio* species. These conditions can be found during the summer months in estuaries and enclosed water bodies with moderate salinity. ECDC has developed a model to map the environmental suitability for *Vibrio* growth in the Baltic Sea ([ECDC Vibrio Map Viewer](#)).

→Update of the week

As of 10 September 2019, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified as medium to high in Kaliningrad (Russia) and Klaipeda (Lithuania).

For the next five days, the environmental suitability for *Vibrio* growth in the Baltic Sea will decrease and it is considered to be very low.

West Nile virus - Multistate (Europe) - Monitoring season 2019

Opening date: 3 June 2019

Latest update: 13 September 2019

During the transmission season, expected to be from June–November 2019, ECDC monitors the occurrence of infections in EU/EEA Member States and EU neighbouring countries and publishes weekly epidemiological updates to inform blood safety authorities of areas at NUTS 3 (Nomenclature of Territorial Units for Statistics 3) or GAUL 1 (Global Administrative Unit Layers 1) level where at least one locally acquired human infection meeting the EU case definition (Commission Implementing Decision (EU) 2018/945) has been reported.

→Update of the week

Between 6 and 12 September 2019, EU Member States reported 42 human cases in Greece (15), Italy (10), Romania (8), Hungary (4), Austria (2), Cyprus (2) and Slovakia (1). This is the first case of autochthonous human West Nile virus infection reported from Slovakia. All other human cases in the EU were reported from areas that have been affected during previous transmission seasons. EU neighbouring countries reported eight cases in Serbia (6) and North Macedonia (2). Human cases were reported for the first time in Skopsi, North Macedonia. This week, seven deaths were reported by Greece (5), Italy (1) and North Macedonia (1).

In the same week, nine outbreaks among equids were reported to the Animal Disease Notification System (ADNS) by Germany (3), Austria (2), France (2), Hungary (1) and Italy (1).

Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 13 September 2019

Measles cases in the EU/EEA primarily occur in unvaccinated populations for both adults and children. Outbreaks are ongoing in countries that had previously eliminated or interrupted endemic transmission.

→Update of the week

Since the previous monthly measles update in the Communicable Disease Threats Report (CDTR) published on 9 August 2019, updates have been provided for 22 EU/EEA countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, France, Germany, Hungary, Ireland, Italy, Lithuania, the Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden, the United Kingdom and Norway.

Most of the cases in 2019 have been reported from Romania (2 614), France (2 429), Italy (1 493), Poland (1 360), Bulgaria (1 157), and Lithuania (821).

In 2019, nine deaths have been reported in the EU/EEA in Romania (5), France (2), Italy (1) and Spain (1).

On 29 August 2019, the European Regional Verification Commission for Measles and Rubella Elimination (RVC) determined that for the first time since the verification process began in the Region in 2012, four countries (Albania, the Czech Republic, Greece and the United Kingdom) had lost their measles elimination status. More information is available on the website of [WHO](#).

Relevant updates outside EU/EEA countries are available from the WHO Regional Office for Africa, the Pan American Health Organization and the WHO Regional Office for the Western Pacific, as well as from the North Macedonia, Switzerland, Ukraine, the United States of America and New Zealand.

The monthly measles report published in the CDTR provides the most recent data on cases and outbreaks based on data reported on national authority websites or through media reports. It is supplementary to ECDC's [monthly measles and rubella monitoring report](#) based on data routinely submitted by 30 EU/EEA countries to The European Surveillance System (TESSy). Data presented in the two monthly reports may differ.

Non EU Threats

New! Group A streptococcus infection – the UK – 2019

Opening date: 11 September 2019

Latest update: 13 September 2019

On 10 September, the Lancet published an article about a new strain of group A streptococcus infection (*Streptococcus pyogenes*).

According to the authors, the new *emm1* lineage, designated M1UK, was identified in 2010 and has become the dominant cause of invasive *Streptococcus pyogenes* in England and Wales.

Ebola virus disease - tenth outbreak - Democratic Republic of the Congo - 2018-2019

Opening date: 1 August 2018

Latest update: 13 September 2019

On 1 August 2018, the Ministry of Health of the Democratic Republic of the Congo declared the 10th outbreak of Ebola virus disease in the country. The outbreak affects North Kivu, South Kivu and Ituri Provinces in the northeast of the country, close to the border with Uganda. In 2019, several imported cases from the Democratic Republic of the Congo were detected in Uganda. However, no autochthonous cases have been reported in Uganda as of 11 September 2019. On 17 July 2019, the [International Health Regulations \(IHR\) Emergency Committee](#) convened, and afterwards the WHO Director-General declared that the outbreak meets all the criteria for a public health emergency of international concern (PHEIC) under the IHR.

→Update of the week

DRC: Since the previous CDTR and as of 11 September 2019, the [Ministry of Health of the Democratic Republic of the Congo](#) (DRC) have reported 43 additional confirmed cases and two probable cases. During the same period, 23 deaths among confirmed cases were reported.

Uganda: The case reported on 29 August 2019 in Kasese District in Uganda died on 30 August. This case was infected in North-Kivu (DRC).

Neisseria gonorrhoeae – France, ex-Cambodia – 2019

Opening date: 4 September 2019

Latest update: 13 September 2019

An article published in Eurosurveillance on 5 September 2019 reported on two cases of ceftriaxone resistant *Neisseria gonorrhoeae* detected in France in June 2019. Of these cases, one reported a recent travel history to Cambodia.

II. Detailed reports

Monitoring environmental suitability of *Vibrio* growth in the Baltic Sea – Summer 2019

Opening date: 3 June 2019

Latest update: 13 September 2019

Epidemiological summary

As of 10 September 2019, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified as medium to high in Kaliningrad (Russia) and Klaipeda (Lithuania).

For the next five days, the environmental suitability for *Vibrio* growth in the Baltic Sea will decrease and it is considered to be very low.

Sources: [ECDC Vibrio Map Viewer](#) | [National Environmental Satellite, Data and Information Service](#)

The model has been calibrated to the Baltic region in northern Europe and may not apply to other settings prior to validation. For the Baltic Sea, the model parameters to be used in the map are the following values: number colour bands (20) scale method linear, legend range minimum value: 0 and maximum value: 28.

ECDC assessment

Elevated SSTs in marine environments with low salt content offer ideal environmental growth conditions for certain *Vibrio* species. These conditions can be found during the summer months in estuaries and enclosed water bodies with moderate salinity. Open ocean environments do not offer appropriate growth conditions for these bacteria due to high salt content, low temperatures and limited nutrient content. These *Vibrio* species can cause vibriosis infections, particularly *V. parahaemolyticus*, *V. vulnificus* and non-toxicogenic *V. cholera*.

Vibriosis in humans caused by these species in the Baltic region has occurred in the past during hot summer months, particularly when SSTs are elevated (above 20 degrees Celsius). The most common clinical manifestations are gastroenteritis with nausea, vomiting and diarrhoea, wound infections when a cut has been exposed, infected wounds or abrasions due to contaminated seawater, primary septicaemia and otitis externa. Risk factors for illness - apart from contact with natural bodies of waters, especially marine or estuarine waters - also include the consumption of shellfish, particularly raw oysters.

Actions

ECDC monitors this threat on a weekly basis during the summer of 2019 and reports on increased environmental suitability for the growth of *Vibrio* species.

West Nile virus - Multistate (Europe) - Monitoring season 2019

Opening date: 3 June 2019

Latest update: 13 September 2019

Epidemiological summary

Between 6 and 12 September 2019, EU Member States reported 42 human cases in Greece (15), Italy (10), Romania (8), Hungary (4), Austria (2), Cyprus (2) and Slovakia (1). This is the first case of autochthonous human West Nile virus infection reported from Slovakia. All other human cases in the EU were reported from areas that have been affected during previous transmission seasons. EU neighbouring countries reported eight cases in Serbia (6) and North Macedonia (2). Human cases were reported for the first time in Skopski, North Macedonia. This week, seven deaths were reported by Greece (5), Italy (1) and North Macedonia (1).

In the same week, nine outbreaks among equids were reported to the Animal Disease Notification System (ADNS) by Germany (3), Austria (2), France (2), Hungary (1) and Italy (1).

Since the beginning of the 2019 transmission season and as of 12 September 2019, EU Member States and EU neighbouring countries reported 291 human infections. EU Member States reported 268 cases in Greece (171), Romania (33), Italy (24), Cyprus (16), Hungary (15), Bulgaria (4), Austria (3), France (1) and Slovakia (1). EU neighbouring countries reported 23 human cases in Serbia (13), Turkey (7) and North Macedonia (3).

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To date, 27 deaths due to West Nile virus infection have been reported by Greece (19), Romania (3), Italy (2), Cyprus (1), North Macedonia (1) and Serbia (1).

During the current transmission season, 26 outbreaks among equids have been reported by Greece (12), Germany (4), Italy (4), Hungary (2), France (2) and Austria (2). In addition, Germany reported 26 outbreaks among birds to ADNS.

ECDC link: [West Nile virus infection atlas](#)

Sources: [TESSy](#) | [Animal Disease Notification System](#)

ECDC assessment

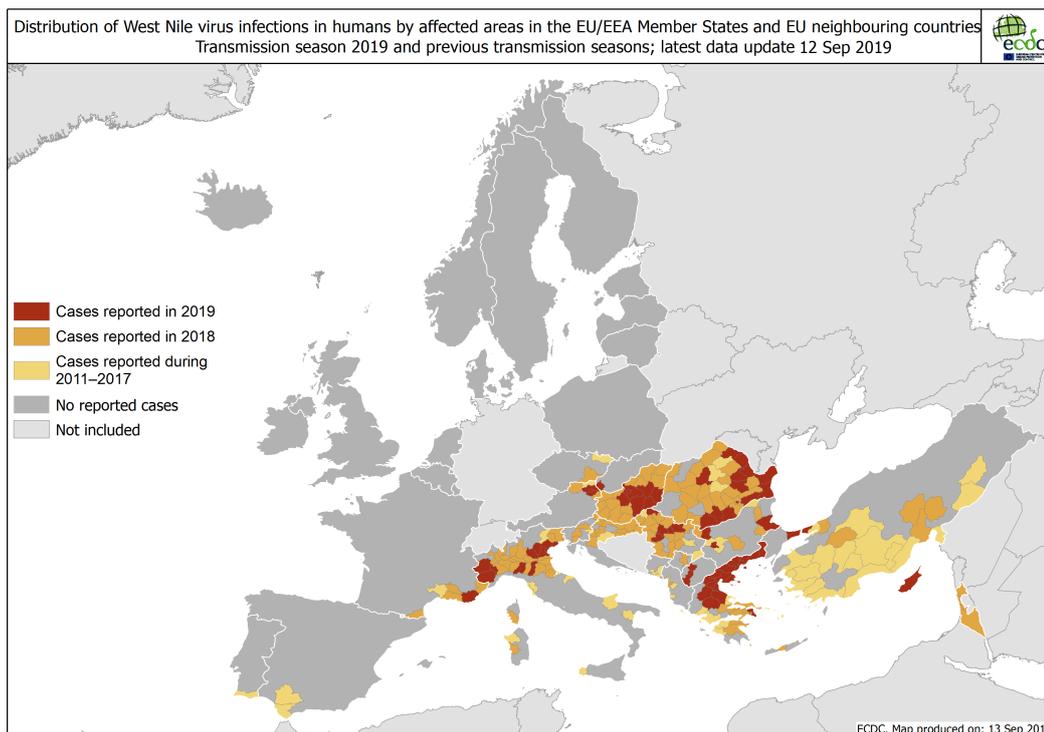
In Slovakia, the first ever case of autochthonous human West Nile virus infection has been reported. All other human infections are reported in EU Member States with known persistent transmission of West Nile virus in previous years. In accordance with [European Commission Directive 2014/110/EU](#), prospective donors should be deferred for 28 days after leaving a risk area for locally acquired infections unless the results of an individual nucleic acid test are negative.

Actions

During the transmission season, ECDC publishes [West Nile virus infection maps](#) together with an epidemiological summary every Friday.

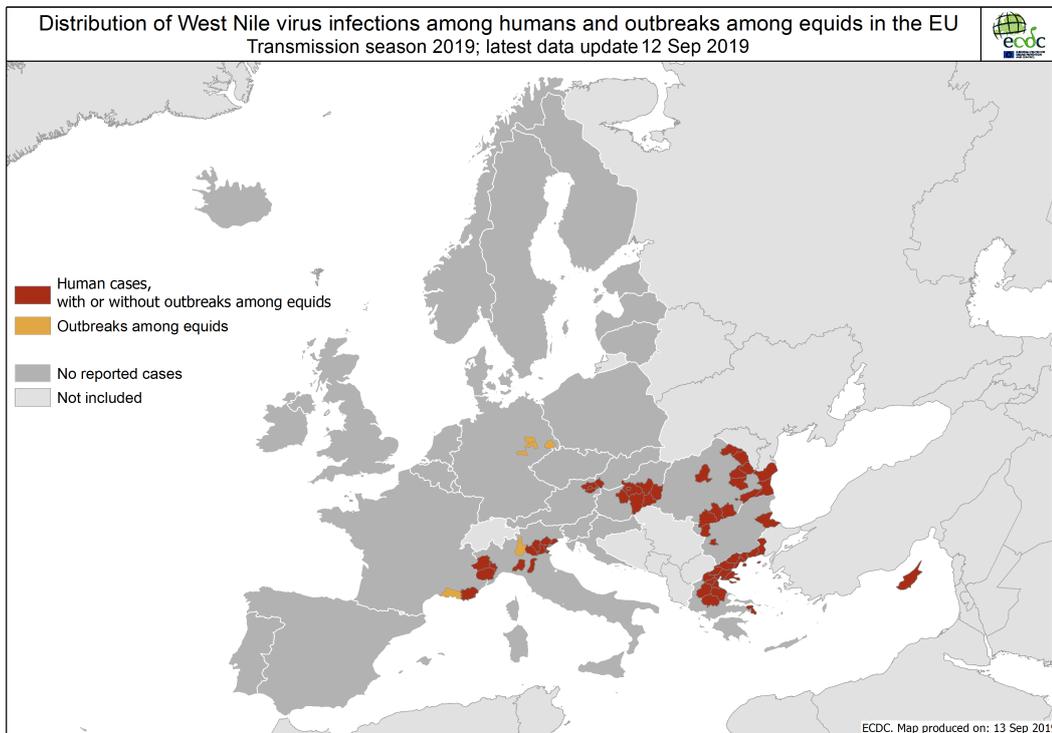
Distribution of human West Nile virus infections by affected areas as of 13 September 2019.

ECDC



Distribution of West Nile virus infections among humans and outbreaks among equids in the EU as of 12 September 2019.

ECDC and ADNS



Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 13 September 2019

Epidemiological summary

Since the previous monthly measles update in the Communicable Disease Threats Report (CDTR) published on 9 August 2019, updates have been provided for 22 EU/EEA countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, France, Germany, Hungary, Ireland, Italy, Lithuania, the Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden, the United Kingdom and Norway.

Most of the cases in 2019 have been reported from Romania (2 614), France (2 429), Italy (1 493), Poland (1 360), Bulgaria (1 157) and Lithuania (821).

In 2019, nine deaths were reported in the EU/EEA in Romania (5), France (2), Italy (1) and Spain (1).

On 29 August 2019, the European Regional Verification Commission for Measles and Rubella Elimination (RVC) determined that for the first time since the verification process began in the Region in 2012, four countries (Albania, the Czech Republic, Greece and the United Kingdom) had lost their measles elimination status. More information is available on the website of [WHO](#).

Relevant updates outside EU/EEA countries are available from the WHO Regional Office for Africa, the Pan American Health Organization and the WHO Regional Office for the Western Pacific, as well as from the North Macedonia, Switzerland, Ukraine, the US and New Zealand.

The monthly measles report published in the CDTR provides the most recent data on cases and outbreaks based on the data reported on national authority websites or through media reports. It is supplementary to ECDC's [monthly measles and rubella monitoring report](#) based on data routinely submitted by 30 EU/EEA countries to The European Surveillance System (TESSy). Data presented in the two monthly reports may differ.

A number of graphs and epicurves relating to measles in the EU/EEA are available in the attached CDTR PowerPoint slides.

Epidemiological summary for EU/EEA countries with updates since last month:

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[Austria](#) has reported 143 cases in 2019 as of 4 September 2019, an increase of seven cases since 1 August 2019. This is twice the total number of cases for the whole of 2018.

[Belgium](#) reported 357 cases during the period January–June 2019, a three-fold increase compared to 117 cases reported during the same period in 2018. The cases were reported from Wallonia, Flanders and Brussels.

[Bulgaria](#) has reported 1 157 cases of measles in 2019, as of week 36, ending on 8 September 2019. This is an increase of 35 cases since the national report in week 31, ending on 4 August 2019.

[Croatia](#) has reported 11 cases from January–June 2019, according to TESSy. One case was previously reported by Croatia early in 2019.

[Cyprus](#) reported six cases in January–July 2019, according to TESSy.

The [Czech Republic](#) has reported 584 cases in January–August 2019, an increase of five cases since the national report on 2 August 2019. The majority of the cases are from Prague (184) and the Silesian (103) regions. Of the reported cases, 55 were imported from several other European countries.

[Estonia](#) has reported 26 cases in 2019, according to data available as of 10 September 2019, which is an increase of two cases since the end of June 2019.

[France](#) has reported 2 429 cases, including two deaths in 2019, as of 4 September 2019, which is an increase of 116 cases and one death since the national report published on 7 August 2019. During the same period in 2018 France reported 2 680 cases of measles.

[Germany](#) had reported 471 cases by week 33 ending 18 August 2019. During the same period in 2018, Germany reported 471 cases. Most of the cases were reported from North Rhine-Westphalia (127), Lower Saxony (81), and Baden-Württemberg (70).

[Hungary](#) has reported 35 measles cases in 2019, as of 25 August 2019, an increase of three cases since the previous national report on 14 July 2019. During the same period in 2018, Hungary reported 17 cases of measles.

[Ireland](#) has reported 54 cases of measles in 2019, as of 31 August 2019, a decrease of two cases since the previous national report on 28 July 2019. During the same period in 2018, Ireland reported 72 cases.

[Italy](#) has not provided a national update since 1 334 cases were reported for the period January–June 2019. According to TESSy, Italy has reported 1 493 cases from January–July 2019.

[Lithuania](#) has reported 821 cases in 2019, as of 6 September 2019. An increase of 27 cases since the national report on 7 August 2019. The majority of cases have been reported in Vilnius and Kaunas.

The [Netherlands](#) has reported 73 cases in 2019, as of 1 September 2019, an increase of 33 cases since the national update on 24 June 2019. Previously, the Netherlands reported 10–20 cases per year with 24 cases reported in 2018.

[Poland](#) has reported 1360 cases in 2019, as of 31 August 2019, an increase of 22 cases since the national report on 31 July 2019.

Portugal has reported nine cases to TESSy for the period January–June 2019, an increase of one case since the report for January–May 2019.

[Romania](#) has reported 2 614 cases, including five deaths, in 2019 as of 6 September 2019, an increase of 281 cases since the national report on 2 August 2019. Since the beginning of the outbreak in October 2016 and as of 6 September 2019, Romania has reported 18 214 confirmed measles cases, including 64 deaths.

[Slovakia](#): no update has been available since 194 measles cases were reported on 3 May 2019. According to TESSy, 310 cases were reported as of July in 2019.

[Spain](#) has reported 257 cases in 2019, as of 28 July 2019, an increase of 19 cases since the national report for 23 June 2019. One death has been reported by the country in 2019, according to TESSy.

[Sweden](#) has reported 19 cases in 2019, according to data available on 10 September 2019, and there have been two new cases since 5 August 2019.

The United Kingdom has reported 608 cases of measles between January–July 2019, according to TESSy.

[Norway](#) has reported 17 in 2019, as of 10 September, an increase of one case since 5 August 2019.

Relevant epidemiological summary for countries outside the EU/EEA:

A global overview is available from the [WHO website](#). Additional information with the latest data available is provided for several countries.

[New Zealand](#) has reported 1 172 confirmed cases of measles from 1 January–11 September 2019. The majority of these cases are in the Auckland region (970).

[North Macedonia](#) has reported 1 900 cases since the onset of the epidemic in December 2018 and as of 30 August 2019. This is an increase of 21 cases since the national report on 1 August 2019.

[Switzerland](#) has reported 209 cases in 2019, as of 3 September 2019, and one further case since the national report was published on 6 August 2019.

[Ukraine](#) has reported 57 746 cases of measles, including 19 deaths in 2019, as of 5 September 2019, an increase of 885 cases, including one death since the national report on 2 August 2019. Of the reported cases 27 357 were adults and 30 389 were children. Measles cases are being reported from all regions of the country.

The [US](#) has reported 1 241 confirmed cases of measles in 31 states in 2019, as of 1 September, and an increase of 69 cases since the national report was published on 1 August 2019.

According to the [WHO Regional Office for Africa](#), as of 8 September 2019 outbreaks of measles in 2019 have been reported from Angola (3 127 cases, 85 confirmed), Cameroon (1 077 cases, 269 confirmed), the Central African Republic (281 cases, 15 confirmed), Chad (23 731 cases, 133 confirmed), the Comoro Islands (132 cases, 56 confirmed), the Democratic Republic of the Congo (165 203 cases, including 5 869 confirmed and 3 222 deaths (CFR: 2.0%)), Ethiopia (7 951 cases and 59 confirmed), Guinea (4 573 cases, 969 confirmed), Kenya (430 cases and 10 confirmed), Liberia (1 263 cases and 148 confirmed), Mali (1 100 cases and 313 confirmed), Niger (9 706 cases), Nigeria (30 669 cases and 1 476 confirmed), Rwanda (74 cases and 12 confirmed), South Sudan (2 472 cases, 72 confirmed), and Uganda (1 275 cases and 604 confirmed).

The [Pan American Health Organization](#): no updates are available since the previous report, which provides data for week 30 ending on 28 July 2019.

According to the [WHO Regional Office of the Western Pacific](#), as of 31 July 2019, overall confirmed measles cases have been reported by Australia, Cambodia, China, Hong Kong SAR, China, Macao SAR, China, Japan, Lao People's Democratic Republic, Malaysia, Mongolia, New Zealand, the Philippines, Republic of Korea, Singapore and Viet Nam.

ECDC assessment

Based on ECDC's epidemiological assessment, there is a high risk of continued widespread circulation of measles in EU/EEA in the near future. Given the potential of importation, measles is a serious cross-border threat to health in the EU/EEA, even though most Member States are deemed to have interrupted endemic transmission. Re-establishment of transmission in these Member States is possible when vaccination coverage is sub-optimal and immunity gaps remain. There is a particularly high burden of measles among infants and adults, the groups at the highest risk of complications. Vaccination coverage of at least 95% in all age groups at national and sub-national levels with two doses of measles-containing vaccine is necessary to interrupt circulation. People of all ages should check their vaccination status, including before travelling. Particular care is recommended if travelling with infants under one year of age or those for whom vaccination is contraindicated as these groups are at increased risk of infection and possible complications. For a more complete overview, consult ECDC's [risk assessment](#) 'Who is at risk for measles in the EU/EEA?' published on 28 May 2019.

Actions

ECDC monitors the measles situation through epidemic intelligence and reports monthly and gathers measles surveillance data through The European Surveillance System (TESSy) for 30 EU/EEA countries.

New! Group A streptococcus infection – the UK – 2019

Opening date: 11 September 2019

Latest update: 13 September 2019

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Epidemiological summary

On 10 September, the Lancet published an article about a new strain of group A streptococcus infection (*Streptococcus pyogenes*).

According to the authors, the new *emm1* lineage, designated M1UK, was identified in 2010 and has become the dominant cause of invasive *Streptococcus pyogenes* in England and Wales. The study suggests that these M1UK isolates have increased in numbers among cases of scarlet fever, throat infections and much rarer invasive infections since 2014. The team add that these M1UK isolates can be easily treated with antibiotics.

Background: According to PHE, between week 2018-37 and week 2019-18, 9 887 cases of scarlet fever have been reported, while an average of 14 128 cases were reported annually during the same period from 2013 to 2018. This year, as in previous years, patients under 10 years of age represent around 90% of the cases.

Source: [London Imperial College](#), [The lancet](#), [PHE](#)

ECDC assessment

According to the authors, the expanded reservoir of M1UK and recognised invasive potential of *emm1 S. pyogenes* provide plausible explanation for the increased incidence of invasive disease, and a rationale for global surveillance.

Ebola virus disease - tenth outbreak - Democratic Republic of the Congo - 2018-2019

Opening date: 1 August 2018

Latest update: 13 September 2019

Epidemiological summary

Since the beginning of the outbreak a year ago and as of 11 September 2019, there have been 3 099 cases (2 988 confirmed, 111 probable) in the Democratic Republic of the Congo (DRC), including 2 077 deaths (1 966 confirmed, 111 probable), according to the Ministry of Health of the Democratic Republic of the Congo. The most active health zones in the past 21 days were Kalunguta, Beni, Mambasa and Mandima.

As of 11 September 2019, 157 healthcare workers have been infected (41 died).

In the DRC, 29 health zones in three provinces have reported confirmed/probable Ebola virus disease cases: Mwenga in South Kivu Province, Alimbongo, Beni, Biena, Butembo, Goma, Kalunguta, Katwa, Kayna, Kyondo, Lubero, Mabalako, Manguredjipa, Masereka, Mutwanga, Musienene, Nyiragongo, Oicha, Pinga and Vuhovi Health Zones in North Kivu Province and Ariwara, Bunia, Mambasa, Nyankunde, Komanda, Lolwa, Mandima, Rwampara and Tchomia Health Zones in Ituri Province.

In Uganda, one imported case (reported on 29 August) died on 30 August in Kasese district, which borders North-Kivu. However, as of today, there have been no reports of autochthonous transmission in Uganda.

Public health emergency of international concern (PHEIC): On 17 July 2019, the WHO Director-General [declared](#) the Ebola virus disease outbreak in the Democratic Republic of the Congo a PHEIC. This declaration followed the fourth IHR Emergency Committee for Ebola virus disease in the Democratic Republic of the Congo on 17 July 2019. The declaration was made in response to the geographical spread observed in recent weeks, as well as the need for a more intensified and coordinated response in order to end the outbreak.

Sources: [CMRE](#) | [Ebola dashboard Democratic Republic of the Congo](#) | [Ministry of Health of the Democratic Republic of the Congo](#) | [WHO](#) | [WHO Regional Office for Africa](#)

ECDC assessment

ECDC assessment: The detection of cases that have travelled to a neighbouring province or country such as Uganda is not unexpected. The use of crowded public transportation over long distances and possible nosocomial transmission are of particular significance in the context of onward transmission.

Implementing response measures remains challenging in affected areas because of the prolonged humanitarian crisis, the unstable security situation and resistance among several sectors of the population. A substantial proportion of cases is detected among individuals not previously identified as contacts, stressing the need to maintain enhanced surveillance and identify the chains of transmission.

The fact that the outbreak is ongoing in areas with a cross-border population flow with Rwanda, South Sudan, Burundi and Uganda remains of particular concern. So far, the identification of these imported cases to previously non-affected areas or the PHEIC does not change the overall risk for the EU/EEA, which remains very low.

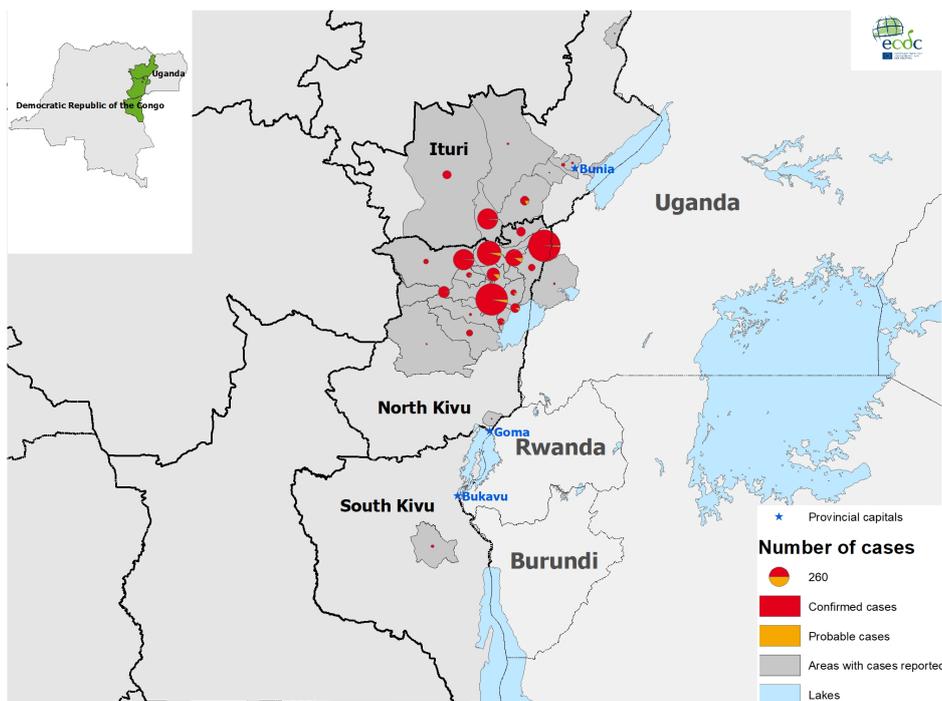
WHO assessment: As of 12 September 2019, the [WHO assessment](#) for the Democratic Republic of the Congo states that the risk of spread remains low at the global level, and very high at national and regional levels. There is cause for concern linked to the increased risk of geographical spread, both within the Democratic Republic of the Congo and to neighbouring countries. Although there are possible early signs of the outbreak easing, including the decrease in numbers of new confirmed cases in Beni and Mandima, these must be interpreted with caution and it is too soon to know if this is an indication of a decrease in transmission intensity of EVD.

Actions

ECDC published an [epidemiological update](#) on 13 June 2019 and updated its [rapid risk assessment](#) on 7 August 2019.

Geographical distribution of confirmed and probable cases of Ebola virus disease, Democratic Republic of the Congo and Uganda, as of 11 September 2019

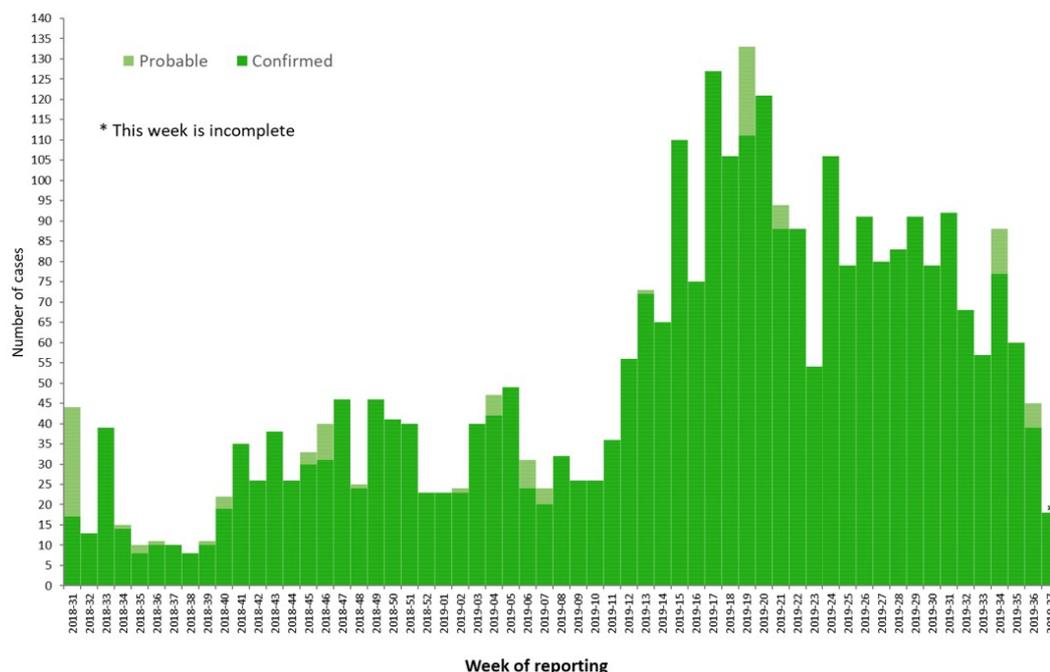
Source: ECDC



Date of production: 13/09/2019

Distribution of confirmed and probable cases of Ebola Virus Disease, Democratic Republic of the Congo and Uganda, as of 11 September 2019

Source: ECDC



Ebola Virus Disease case distribution in DRC and Uganda, as of 11 September 2019

Source: ECDC

	Number of confirmed cases	Number of probable cases	Confirmed and probable cases	Number of deaths	Conf/Prob cases in past 7 days
Democratic Republic of the Congo	2988	111	3099	2077	
North-Kivu Province	2595	98	2693	1862	
Alimbongo	5	0	5	2	
Beni	669	9	678	440	ACTIVE
Biena	16	2	18	14	
Butembo	284	3	287	344	ACTIVE
Goma	1	0	1	1	
Kalunguta	177	17	194	85	ACTIVE
Katwa	650	23	673	488	ACTIVE
Kayna	26	0	26	8	ACTIVE
Kyondo	22	4	26	18	ACTIVE
Lubero	31	2	33	6	
Mabalako	372	17	389	299	ACTIVE
Manguredjipa	18	0	18	12	
Masereka	50	6	56	23	
Musienene	84	1	85	34	
Mutwanga	32	0	32	12	
Nyiragongo	1	0	1	1	
Oicha	53	0	53	24	
Pinga	1	0	1	0	
Vuhovi	103	14	117	51	
Ituri province	387	13	400	212	
Ariwara	1	0	1	1	
Bunia	4	0	4	4	
Komanda	44	9	53	37	
Lolwa	3	0	3	1	
Mambasa	47	0	47	15	ACTIVE
Mandima	277	4	281	148	ACTIVE
Nyakunde	1	0	1	1	
Rwampara	8	0	8	3	
Tchomia	2	0	2	2	
South-Kivu	6	0	6	3	
Mwenga	6	0	6	3	
Uganda	1	0	1	1	
Kasese province	1	0	1	1	
Kasese	1	0	1	1	
Cumulative Total	2989	111	3100	2078	

Neisseria gonorrhoeae – France, ex-Cambodia – 2019

Opening date: 4 September 2019

Latest update: 13 September 2019

Epidemiological summary

An article published in Eurosurveillance on 5 September 2019 reported on two cases of ceftriaxone resistant *Neisseria gonorrhoeae* detected in France in June 2019. Of these cases, one reported recent travel history to Cambodia.

The case travelled to Battambang Province in Cambodia between April and early June 2019, where he had sexual intercourse with a female partner. On returning to France, he developed symptoms of urethritis and visited a general practitioner in mid-June 2019 who suspected a urinary tract infection but did not treat with antimicrobials. Two weeks after this visit, the patient again sought medical assistance with his wife, who had developed symptoms of vaginitis.

Screening for sexually transmitted infections (STIs) was initiated using nucleic acid amplification tests (NAATs) and culture for the detection of NG at genital sites only. The NAAT from the first void urine from the male patient resulted positive for GC, while the NAAT and culture of the vaginal swab were both positive.

Antimicrobial susceptibility testing of the strain revealed an MDR-GC isolate resistant to ceftriaxone (MIC 0.5 mg/L), cefixime (MIC 2 mg/L), tetracycline (MIC 4 mg/L) and ciprofloxacin (MIC > 32 mg/L). The isolate remained susceptible to spectinomycin (MIC 8 mg/L) and had an azithromycin MIC below the epidemiological cut-off value (MIC 0.5mg/L). It also had a low MIC for gentamicin (MIC 4 mg/L) and was positive for beta-lactamase activity. Upon receiving the antimicrobial susceptibility result, the two patients were treated with a high dose (1 g of intramuscular) of ceftriaxone, as indicated in such cases. Extragenital sites were screened using NAATs on anal and pharyngeal swabs five days after the treatment initiation and the results were negative. The patients returned for a test of cure two weeks later. Both were asymptomatic and considered cured as NAATs were negative at the three sites (anal, pharyngeal and genital sites).

The isolate belongs to the FC428 clone that probably originated in Asia. This is the third time that a *N. gonorrhoeae* isolate has displayed high-level ceftriaxone resistance in France.

Source: [Eurosurveillance](#)

ECDC assessment

Isolates of multidrug and extensively drug-resistant *Neisseria gonorrhoeae* have been previously reported. Most FC428-related strains have been imported from South-East Asia to European countries, however there has been reported transmission in Europe, as highlighted in the ECDC expert comment on extensively drug-resistant gonorrhoea: [risk of further dissemination within and across Europe on 1 April 2019](#).

The spread of isolates displaying resistance to ceftriaxone and resistance/reduced susceptibility to azithromycin is of concern as these two antibiotics are recommended as first line treatment for *N. gonorrhoeae* by European guidelines and alternative treatment options are limited. Widespread resistance would have a significant public health impact. The detailed recommendations and options for response from [ECDC Rapid risk assessment on Extensively drug-resistant \(XDR\) *Neisseria gonorrhoeae* in the United Kingdom and Australia](#) remain valid, in particular provision of information on safer sex practice to travellers. In addition, clinicians need to take detailed travel histories to inform STI management, as recommended in the Eurosurveillance paper.

Actions

ECDC will keep monitoring this event through epidemic intelligence activities and will report again if relevant epidemiological updates become available.

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