

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

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#### Monitoring environmental suitability of *Vibrio* growth in the Baltic Sea – Summer 2018

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Opening date: 24 May 2018

Latest update: 31 August 2018

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 E3 Geoportals](#)).

→Update of the week

As of 31 August 2018, environmental suitability for *Vibrio* growth in the Baltic Sea for the next five days is considered to be medium in coastal areas of Poland.

## West Nile virus - Multistate (Europe) - Monitoring season 2018

Opening date: 30 May 2018

Latest update: 31 August 2018

During the West Nile virus transmission season (expected to be between June and November), ECDC monitors the occurrence of West Nile fever cases in EU/EEA Member States and EU neighbouring countries and publishes weekly epidemiological updates to inform blood safety authorities of areas where there is ongoing virus transmission.

### →Update of the week

Between 24 and 30 August 2018, EU Member States reported 300 human cases of West Nile fever: Italy (144), Romania (61), Greece (41), Hungary (38), Austria (8), France (6), Croatia (1) and Slovenia (1). EU neighbouring countries reported 55 cases: Serbia (54) and Kosovo\* (1).

In six areas, human cases were reported for the first time: Italy (3), Austria (1) and Slovenia (1). All other human cases were reported from areas that have been affected during previous transmission seasons.

This week, 25 deaths were reported by Romania (6), Serbia (6), Italy (7), Greece (5) and France (1).

In the same week, 13 outbreaks among equids were reported, all by Hungary.

According to the [Friedrich-Loeffler-Institut \(FLI\)](#), West Nile virus infection was detected in birds in Germany for the first time. The infection was detected in [two dead owls](#) in a bird park in Halle (Saale River), Saxony-Anhalt, Germany.

\*This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the International Court of Justice Opinion on the Kosovo Declaration of Independence.

## Non EU Threats

### New! Cholera - Algeria - 2018

Opening date: 27 August 2018

Latest update: 31 August 2018

On 23 August 2018, the Algerian Ministry of Health reported a cholera outbreak in the northern part of the country, including the capital city of Algiers. According to the health authorities, the first cases identified had onset of symptoms on 7 August 2018.

### →Update of the week

As of 26 August 2018 and since the beginning of the outbreak, 161 suspected cholera cases including two deaths (CFR: 1.2%) have been reported in Algeria.

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

Opening date: 1 August 2018

Latest update: 31 August 2018

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 is affecting North Kivu and Ituri Provinces in the northeast of the country, close to the border with Uganda.

### →Update of the week

Over the past week, the Ministry of Health of the Democratic Republic of the Congo has reported 13 additional cases and 14 deaths.

As of 29 August 2018, there have been 116 Ebola virus disease cases (86 confirmed, 30 probable), including 77 deaths (47 confirmed, 30 probable).

### Middle East Respiratory Syndrome Coronavirus (MERS-CoV) - the UK ex Middle East - 2018

Opening date: 23 August 2018

Latest update: 31 August 2018

On 23 August 2018, [Public Health England](#) notified a case of Middle East respiratory syndrome coronavirus (MERS-CoV) detected in England. The case is a resident of Saudi Arabia, which is probably where the patient became infected before travelling to the UK.

### →Update of the week

No additional cases have been detected as of 30 August 2018.

## II. Detailed reports

### Monitoring environmental suitability of *Vibrio* growth in the Baltic Sea – Summer 2018

Opening date: 24 May 2018

Latest update: 31 August 2018

#### Epidemiological summary

As of 31 August 2018, environmental suitability for *Vibrio* growth in the Baltic Sea for the next five days is considered to be medium in coastal areas of Poland.

Sea surface temperatures in the Baltic Sea can be consulted [here](#). A *Vibrio* suitability tool is available on the [E3 Geoportal](#). This 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 following model parameters should be used in the map: number of colour bands=20; scale method=linear; legend range=minimum value 0, maximum value 28.

#### Countries reporting *Vibrio* cases:

Since 24 August, no cases have been reported by EU countries.

As of 24 August 2018, [Norway](#) has reported six cases of *Vibrio* infection and one of *Shewanella* infection, all associated with bathing in the Oslo Fjord. In addition to these seven severe cases, 27 people have had mild *Vibrio* sores and ear infections.

[Sweden](#) has reported 58 cases of *Vibrio* infection, including one death, according to media reports.

[Germany](#) has reported one fatal case associated with bathing in the Baltic Sea in late July 2018.

[Denmark](#) has detected several cases during the summer of 2018.

[Finland](#) has also detected several infections this summer, according to local media reports.

#### 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 were 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 is monitoring this threat on a weekly basis during the summer of 2018.

### West Nile virus - Multistate (Europe) - Monitoring season 2018

Opening date: 30 May 2018

Latest update: 31 August 2018

#### Epidemiological summary

Between 24 and 30 August 2018, EU Member States reported 300 human cases of West Nile fever: Italy (144), Romania (61), Greece (41), Hungary (38), Austria (8), France (6), Croatia (1) and Slovenia (1). EU neighbouring countries reported 55 cases: Serbia (54) and Kosovo\* (1).

In six areas, human cases were reported for the first time: Italy (3), Austria (1) and Slovenia (1). All other human cases were reported from areas that have been affected during previous transmission seasons.

This week, 25 deaths were reported by Romania (6), Serbia (6), Italy (7), Greece (5) and France (1).

In the same week, 13 outbreaks among equids were reported, all by Hungary.

According to the Friedrich-Loeffler-Institut (FLI), West Nile virus infection was detected in birds in Germany for the first time. The infection was detected in two dead owls in a bird park in Halle (Saale River), Saxony-Anhalt, Germany.

In 2018, as of 30 August 2018, EU Member States reported 710 human cases: Italy (327), Greece (147), Romania (117), Hungary (96), France (11), Austria (8), Croatia (3) and Slovenia (1). EU neighbouring countries reported 265 human cases: Serbia (213), Israel (49) and Kosovo\* (3). To date, a total of 64 deaths due to West Nile fever have been reported by Serbia (21), Greece (16), Italy (13), Romania (12), France (1) and Kosovo\* (1).

During the current transmission season, 77 outbreaks among equids have been reported by Italy (41), Hungary (31) and Greece (5).

\*This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the International Court of Justice Opinion on the Kosovo Declaration of Independence.

**Publications:** [An early start of West Nile virus seasonal transmission: the added value of One Health surveillance in detecting early circulation and triggering timely response in Italy, June to July 2018](#)

[Early start of the West Nile fever transmission season 2018 in Europe](#)

**ECDC links:** [West Nile fever](#) | [Atlas](#)

**Sources:** [TESSy](#) | [ADNS](#)

## ECDC assessment

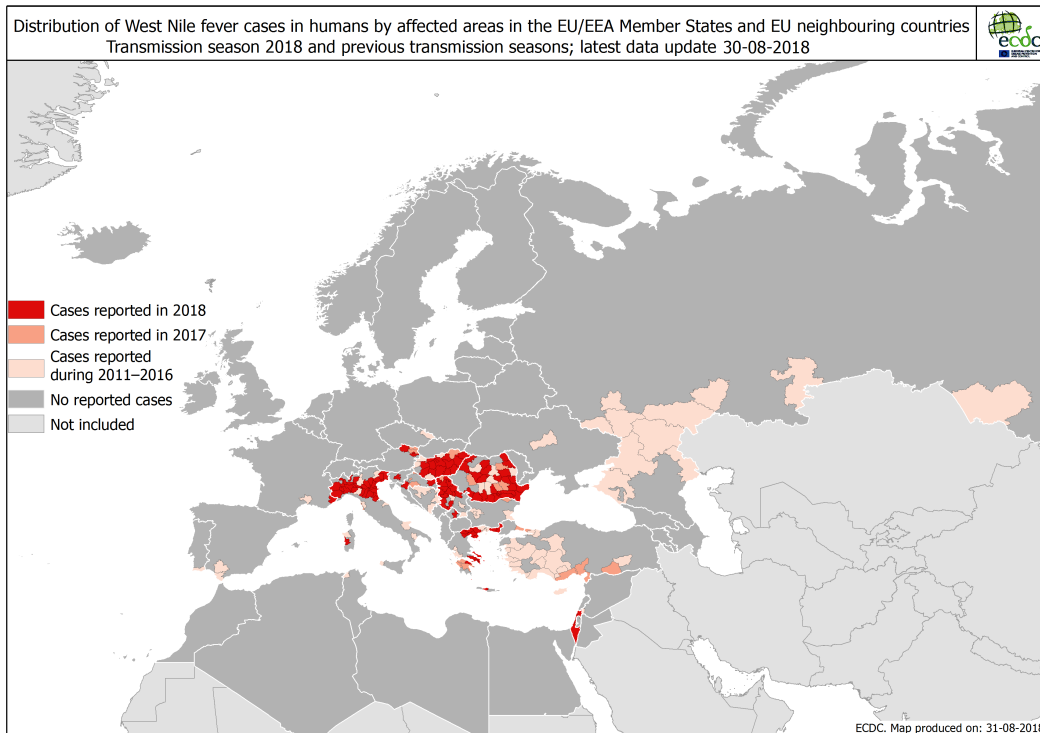
The 2018 transmission season started earlier than usual and higher case numbers have been reported compared with the same period in the previous years. All human cases reported during the current transmission season were reported in previously affected countries. In accordance with [European Commission Directive 2014/110/EU](#), prospective blood donors should defer for 28 days after leaving an area with evidence among humans of West Nile virus circulation among humans unless the results of an individual nucleic acid test are negative.

## Actions

During the transmission season, ECDC publishes [West Nile fever maps](#) together with an epidemiological summary every Friday. ECDC published a rapid risk assessment on the '[Early large increase in West Nile virus infections in the EU/EEA and EU neighbouring countries](#)' on 13 August 2018.

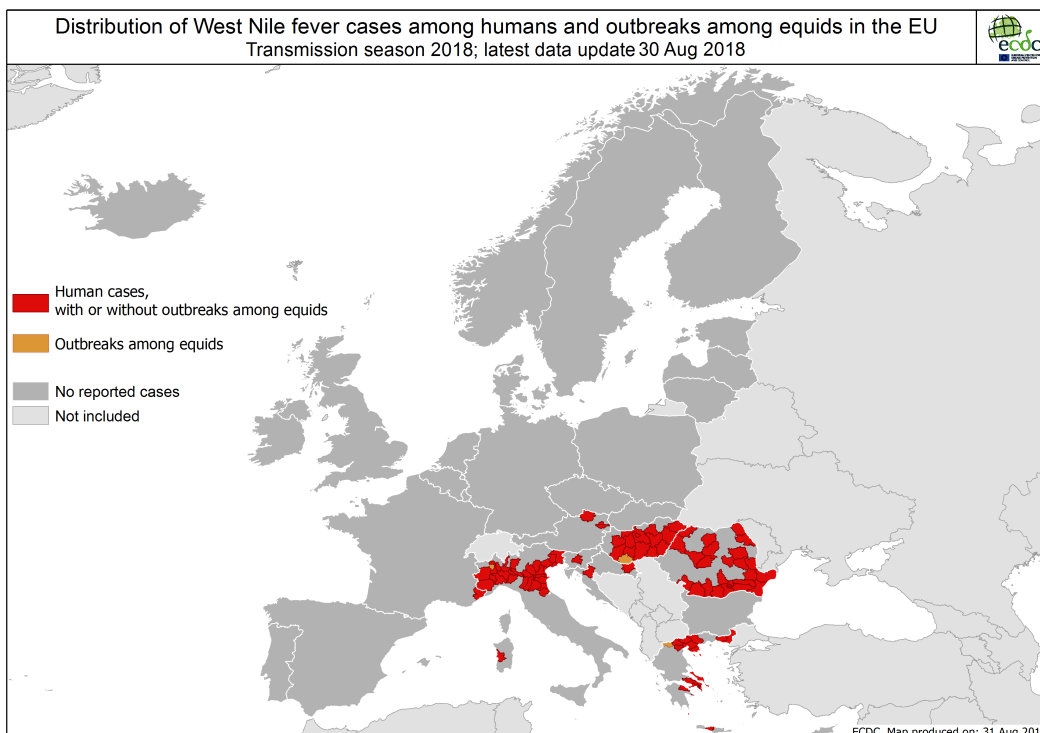
Distribution of human West Nile fever cases by affected areas as of 30 August 2018.

ECDC



Distribution of West Nile fever cases among humans and outbreaks among equids in the EU as of 30 August 2018.

TESSy and ADNS



**New! Cholera - Algeria - 2018**

Opening date: 27 August 2018

Latest update: 31 August 2018

## Epidemiological summary

As of 26 August 2018, the Algerian Ministry of Health has reported confirmed cholera cases in the northern part of the country. So far, 161 cholera cases have been reported, including two deaths (CFR: 1.2%). Among these cases, 56 cases have been confirmed. Five areas are reporting confirmed cases: Bouira (3), Blida (30, including two deaths), Tipaza (12), Algiers (10) and Medea (1).

Additionally, on 27 August 2018, Institut Pasteur in Algeria confirmed that laboratory analyses revealed the presence of *Vibrio cholerae* O1 serotype Ogawa. A natural water source in Sidi el Kebir, located in the village of Hamr Al Ain in the wilaya of Tipaza, was found to be contaminated with *Vibrio cholerae*. According to the Ministry of Health, health authorities have taken corrective measures and have closed down this source.

**Source:** [Algerian Ministry of Health](#), [Institut Pasteur Algeria](#)

## ECDC assessment

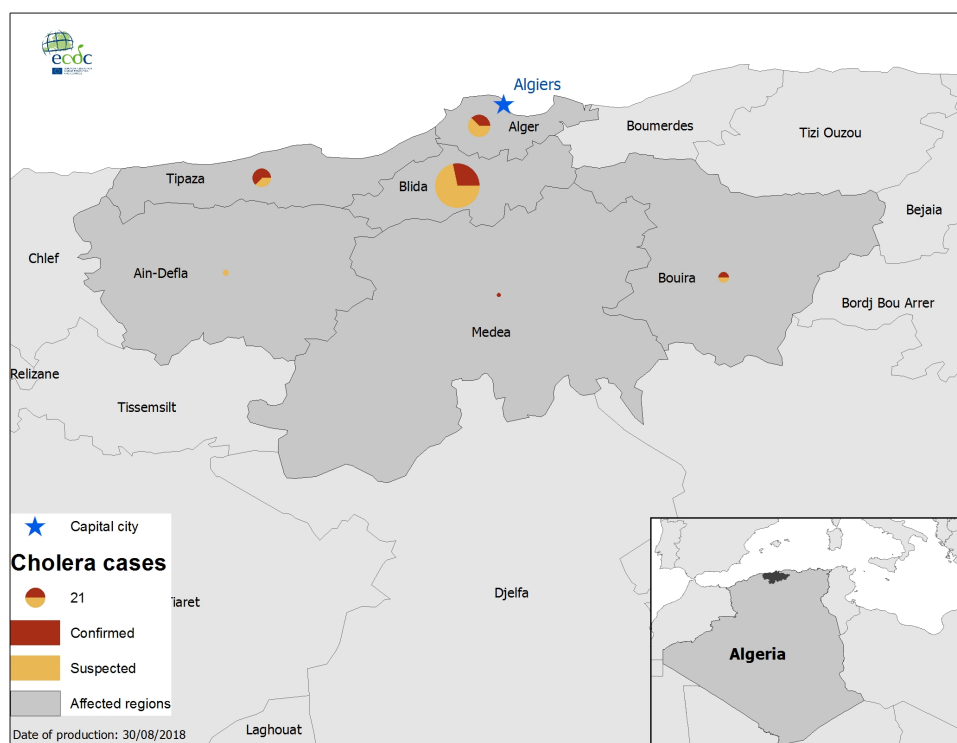
Travellers to cholera-affected areas should seek advice from travel health clinics to assess their personal risk and apply precautionary measures to prevent infection, such as vaccination and sound hygiene practices. These can include drinking bottled water or water treated with chlorine, carefully washing fruits and vegetables with bottled or chlorinated water before consumption, regularly washing hands with soap, eating thoroughly cooked food and avoiding consumption of raw seafood products. These preventive measures would apply as well for EU/EEA residents in the affected areas. At this point, although the risk for the EU/EEA is very low, the risk of importation of a cholera case cannot be ruled out.

## Actions

ECDC is preparing a rapid risk assessment to be published on the ECDC website on 7 September 2018. Additionally, ECDC has published a [news item](#) about this event.

## Geographical distribution of cholera cases, Algeria, as of 26 August 2018

ECDC



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

Opening date: 1 August 2018

Latest update: 31 August 2018

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## Epidemiological summary

As of 29 August 2018, the Ministry of Health of the Democratic Republic of the Congo has reported 116 Ebola virus disease cases (86 confirmed, 30 probable), including 77 deaths (47 confirmed, 30 probable). As of 20 August 2018, 13 cases have been reported in healthcare workers. Of these, 12 are confirmed and one has died.

Six health zones in two provinces have reported confirmed and probable Ebola virus disease cases, including Mabalako, Beni, Butembo, Oicha and Musienene health zones in North Kivu Province and Mangina health zone in Ituri Province.

As of 30 August 2018 and according to a European Civil Protection and Humanitarian Aid Operations (ECHO) report, 2 444 contacts have been identified in Mabalako (1 466), Mandima (514), Beni (347) and Oicha (117). Of these, 95.7% are being followed up.

**Response activities:** As of 30 August 2018, 4 851 people have been vaccinated in Mabalako (2 523), Beni (1 176), Mandima (1 017), Oicha (121) and Kinshasa (14). All were first-line professionals.

**Travel:** According to the WHO disease outbreak news (DON) released on 14 August 2018, Burundi, Central African Republic, Rwanda, South Sudan, Uganda and Zambia are implementing [entry screening](#).

In EU/EEA countries, [Belgium](#), [Germany](#), [Italy](#) and [Spain](#) have issued advice against traveling to the North Kivu region due to the Ebola outbreak. Additionally, the [US CDC](#) and [WHO](#) have issued travel recommendations.

**Sources:** [Ministry of Health of the Democratic Republic of the Congo](#) | [WHO](#)

## ECDC assessment

Due to the security situation and humanitarian crisis in North Kivu Province, implementation of outbreak control measures may be challenging. The risk of introduction of the virus via an infected traveller to the EU/EEA is considered very low at this stage.

Transport routes linking the affected areas to other regions in the Democratic Republic of the Congo (DRC) and several neighbouring countries (mainly Rwanda and Uganda) may facilitate the spread of the virus. The situation is aggravated by the displacement of people due to conflict and crisis. According to [WHO](#), the public health risk is considered high at the national and regional levels.

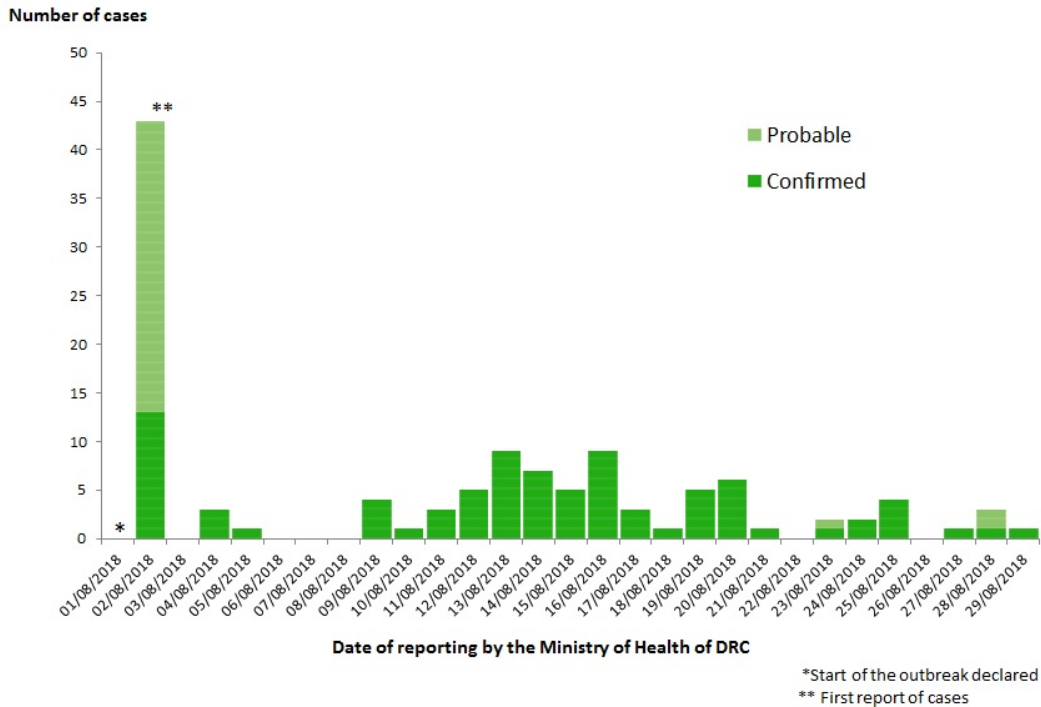
ECDC published a [rapid risk assessment](#) on 9 August 2018.

## Actions

ECDC is monitoring this threat on a daily basis through epidemic intelligence.

Distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 29 August 2018

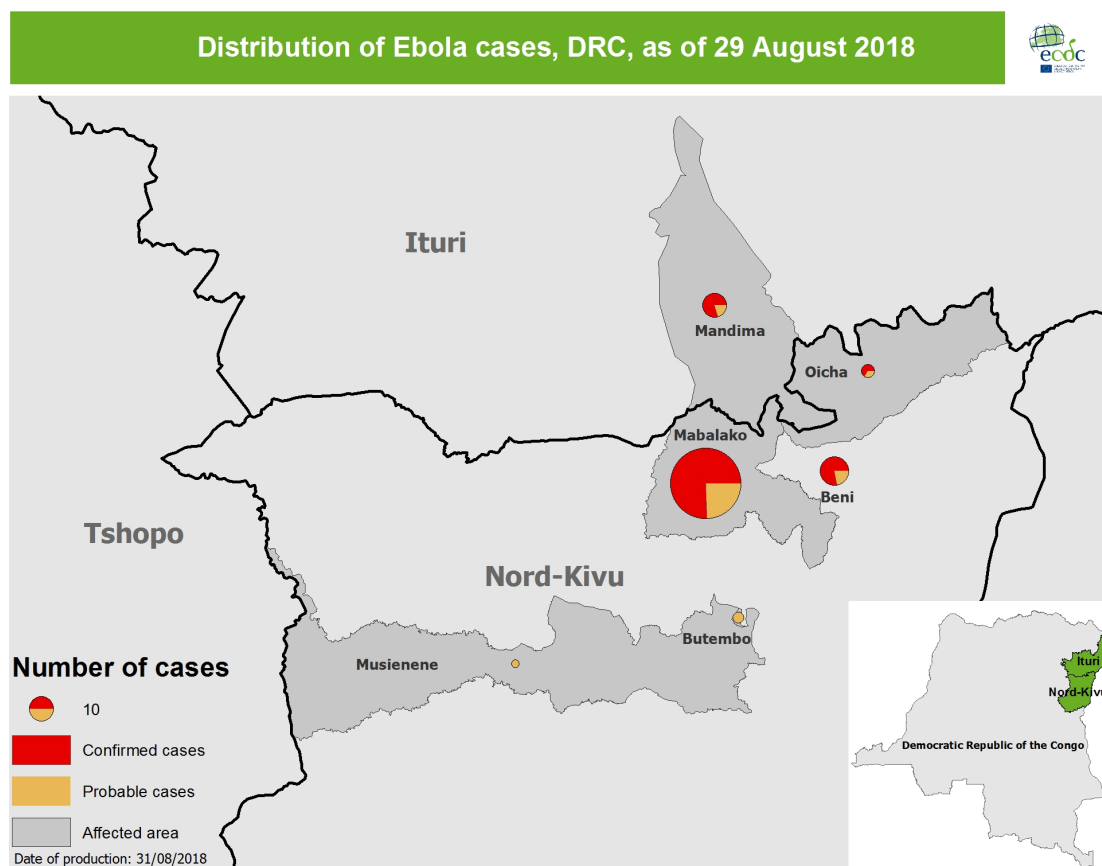
Epicurve adapted from DRC MoH data





## Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 29 August 2018

ECDC



## Middle East Respiratory Syndrome Coronavirus (MERS-CoV) - the UK ex Middle East - 2018

Opening date: 23 August 2018

Latest update: 31 August 2018

### Epidemiological summary

On 23 August 2018, Public Health England (PHE) reported one case of MERS-CoV detected in England. The patient is a resident of Saudi Arabia who had travelled from Jeddah to Manchester. The case was transferred to an isolation ward after MERS-CoV was suspected and is currently at a specialised hospital in Liverpool in a stable condition. According to UK authorities, a limited number of close contacts have been identified and are being followed up. This is the fifth case of MERS-CoV diagnosed in the UK, with previous cases diagnosed in 2012 to 2013.

PHE has released a press release that is available here:

**Source:** [Public Health England](#) | [ECDC MERS-CoV RRA](#)

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## ECDC assessment

The majority of MERS-CoV infections continue to be reported from the Middle East and more specifically from Saudi Arabia. Sporadic MERS-CoV infections in travellers returning to EU/EEA countries can be expected given the regular occurrence of MERS-CoV infections in the Middle East and the substantial number of people travelling between the region and EU countries.

European public health authorities should remain vigilant, continue surveillance of acute respiratory infections and maintain preparedness for travel-related MERS-CoV cases entering the EU/EEA. Information about the risk should be shared with clinicians to maintain increased awareness for early identification, isolation and diagnosis of possible MERS-CoV. Adherence to strict infection control protocols through contact with possible cases is critical for preventing the further spread of MERS-CoV in healthcare settings. Previously issued advice for travellers, including pilgrims, and healthcare workers remains valid. EU residents travelling to Middle Eastern countries need to be made aware that MERS-CoV is circulating in these areas. Close contact with dromedary camels, consumption of raw/undercooked camel products, such as milk, and transmission in hospital settings are the main sources of infection.

Countries should advise travellers returning from all areas affected by MERS-CoV to seek medical attention if they develop a respiratory illness with fever and cough or diarrhoea during the two weeks following their return and to disclose their recent travel history to their healthcare provider.

The risk of widespread transmission of MERS-CoV in the community after sporadic importation into the EU/EEA remains very low. The risk of transmission of MERS-CoV in healthcare settings after sporadic importation into the EU/EEA remains low provided appropriate infection control measures are implemented rapidly when seeing suspected cases.

## Actions

ECDC published a rapid risk assessment, '[Severe respiratory disease associated with Middle East respiratory syndrome coronavirus \(MERS-CoV\), 22nd update](#)', on 29 August 2018.

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