I. Executive summary

World Hepatitis Day: targeted testing remains public health challenge

European surveillance data show ongoing transmission of viral hepatitis, with more than 50 000 newly diagnosed cases of hepatitis B and hepatitis C each year from across the European Union/European Economic Area (EU/EEA).

These figures do not even provide a true picture of the epidemiological burden, as ECDC estimates that around 9 million Europeans live with chronic hepatitis B or C. This includes many people with an asymptomatic and hence undiagnosed and untreated hepatitis infection, which can lead to liver cirrhosis and hepatocellular carcinoma.

Targeted testing to reach those most at risk of infection is an essential element of any strategy to eliminate viral hepatitis across the countries in EU/EEA. ECDC's guidance on integrated viral hepatitis and HIV testing provides options and ideas based on the latest scientific evidence for national or local hepatitis B, C and HIV testing guidelines and programmes.

ECDC coordinates enhanced surveillance for hepatitis A, B and C to help countries define epidemiological trends or transmission patterns among newly diagnosed cases. In addition, data on hepatitis A and hepatitis E shows ongoing transmission of these infections among EU/EEA residents.

European travellers to endemic countries and individuals of other risk groups (including men who have sex with men) are at higher risk of hepatitis A infection. WHO recommends vaccination for these individuals. Since hepatitis A is prone to be associated with outbreaks, harmonised molecular characterisation and sharing of sequences at the EU/EEA level is essential to rapidly detect cross-border outbreaks. ECDC has been collaborating with EU/EEA Member States towards comparable sequencing of hepatitis A virus.

Most hepatitis E reported cases are locally acquired in EU/EEA countries and there is evidence that this number is increasing. ECDC supports EU Member States in harmonising national surveillance systems where they exist, case definitions and laboratory methods for diagnosis.

EU Threats

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

Opening date: 3 June 2019  Latest update: 26 July 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 25 July 2019, the environmental suitability for Vibrio growth in the Baltic Sea was identified to be very low to low, except in Szczecin Lagoon (Germany and Poland).

For the next five days the environmental suitability for Vibrio growth in the Baltic Sea will increase. It is considered to be medium to high in the majority of the coast in the Baltic Sea: Øresund (Denmark and Sweden), Szczecin Lagoon (Germany and Poland), the northern coast of Poland, especially the Gulf of Gdansk, Klaipeda County (Lithuania), Gulf of Riga (Estonia and Latvia), Gulf of Finland (Estonia and Finland), Turku Archipelago and Åland Islands (Finland), Gulf of Bothnia (Finland and Sweden), Stockholm Archipelago and Södermanland, Östergötland, Kalmar and Gotland Counties (Sweden). It is considered to be very high in the northern Gulf of Riga and Hiiumaa (Estonia), northern Gulf of Finland, Åland Islands and Vaasa (Finland).

Outside EU/EEA countries, the environmental suitability for Vibrio growth in the Baltic Sea was identified to be very low to low. For the next five days, it is considered to be medium to high in Kaliningrad and Saint Petersburg (Russia).

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

Opening date: 3 June 2019  Latest update: 26 July 2019

During the West Nile virus infection transmission season, expected to be from June–November 2019, ECDC monitors the occurrence of West Nile virus 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 West Nile virus infection meeting the EU case definition (Commission Implementing Decision (EU) 2018/945) has been reported.

During the 2018 transmission season, 2 083 human cases were reported by EU Member States and EU neighbouring countries. In the same period, EU Member States reported 285 outbreaks among equids.

Update of the week
From 19–25 July 2019, seven human cases were reported in Greece (5), Italy (1) and Romania (1). All cases were reported from areas that have had human cases reported in the previous transmission seasons. Romania reported one death this week. Additionally, during the same period, no equine outbreaks of West Nile virus infection were reported to the Animal Disease Notification System.

Non EU Threats

New! Falsified rabies vaccine - Philippines - 2019

Opening date: 23 July 2019  Latest update: 26 July 2019

In July 2019, WHO and the Food and Drug Administration of the Philippines issued an advisory regarding three different falsified rabies vaccines and one falsified anti-rabies serum circulating in the Philippines.
Poliomyelitis – Multistate (World) – Monitoring global outbreaks
Opening date: 8 September 2005  Latest update: 26 July 2019

Global public health efforts are ongoing to eradicate polio by immunising every child until transmission of the virus has stopped and the world becomes polio-free. Polio was declared a public health emergency of international concern by WHO on 5 May 2014 due to concerns over the increased circulation and international spread of wild poliovirus in 2014. In June 2002, the WHO European Region was officially declared polio-free.

→ Update of the week

Wild poliovirus: Since the last polio update on 12 July 2019, 19 new cases of wild poliovirus type 1 have been reported in Pakistan (18) and Afghanistan (1).

Circulating vaccine-derived poliovirus (cVDPV): Sixteen new cases of cVDPV type 2 (cVDPV2) have been reported in the Democratic Republic of the Congo (6), the Central African Republic (4), which declared a national public health emergency, Nigeria (3), Angola (2) and China (1). In addition, two cVDPV1 cases have been reported in Myanmar. The country has implemented response measures and informed neighbouring countries.

Opening date: 1 August 2018  Latest update: 26 July 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 and Ituri Provinces in the northeast of the country close to the border with Uganda. In June 2019, several cases from the Democratic Republic of the Congo were detected in Uganda. However, Uganda has not reported autochthonous transmission as of 24 July 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

Since the previous CDTR and as of 24 July 2019, the WHO and the Ministry of Health of the Democratic Republic of the Congo have reported 88 additional confirmed cases. During the same period, 57 deaths were reported. Among the new reported cases in the past week, four are healthcare workers.

As of 24 July 2019, there have been no new confirmed cases from Goma health zone. Response measures have been taken, including intense follow up of contacts of the confirmed case who arrived in Goma on 14 July 2019.

On 24 July 2019, the Ministry of Health of Uganda marked the end of 42 days since the death of the Ebola virus disease patient that occurred in Kasese District. There are no new confirmed cases in Uganda.

On 20 July 2019, it was announced that a technical secretariat was established to take over the coordination of the Ebola virus disease response in the Democratic Republic of the Congo. This technical secretariat is composed of national experts and is under the direct supervision of the presidency of the republic. Following this event, the minister of health, Dr. Oly Ilunga Kalenga, handed in his letter of resignation on 22 July 2019.

Since the declaration of the PHEIC, several organisations have pledged additional economic support. Among these, the European Commission reaffirmed its commitment and provision of additional support, and the World Bank announced it is mobilising up to 300 million USD to scale up support.

Cholera – Multistate (World) – Monitoring global outbreaks
Opening date: 20 April 2006  Latest update: 26 July 2019

Several countries in Africa, the Americas and Asia have reported cholera outbreaks. Major ongoing outbreaks are reported in the Democratic Republic of the Congo, Haiti and Yemen.

→ Update of the week

Since the last update on 14 June 2019, new cases have been reported worldwide and countries such as Benin, Burundi and Uganda are reporting new outbreaks.

The countries reporting the majority of new cases since the previous update are Yemen (125 231 cases, 96 deaths), the Democratic Republic of the Congo (2 931 cases, 39 deaths) and Kenya (1 296 cases, 10 deaths).

Additionally, WHO has closed the events for the cholera outbreaks in Zambia and Zimbabwe during this period.
II. Detailed reports

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

Epidemiological summary
As of 25 July 2019, the environmental suitability for Vibrio growth in the Baltic Sea was identified to be very low to low, except in Szczecin Lagoon (Germany and Poland).

For the next five days the environmental suitability for Vibrio growth in the Baltic Sea will increase. It is considered to be medium to high in the majority of the coast in the Baltic Sea and very high in northern Gulf of Riga and Hiiumaa (Estonia), northern Gulf of Finland, Åland Islands and Vaasa (Finland).

Outside EU/EEA countries, the environmental suitability for Vibrio growth in the Baltic Sea was identified to be very low to low. For the next five days, it is considered to be medium to high in Kaliningrad and Saint Petersburg (Russia).

Sources: ECDC | 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 worldwide 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-toxigenic 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

Epidemiological summary
From 19–25 July 2019, seven human cases were reported in Greece (5), Italy (1) and Romania (1). All cases are reported from areas which have had human cases reported in the previous transmission seasons. Romania reported one death this week.

Additionally, during the same period, no equine outbreaks of West Nile virus infection were reported to the Animal Disease Notification System.

Since the beginning of the 2019 transmission season and as of 25 July 2019, 13 human West Nile virus infections have been reported in EU Member States and EU neighbouring countries by Greece (10), Romania (2) and Italy (1). One death has been reported by Romania so far. In addition, two equine outbreaks have been reported in Greece to the Animal Disease Notification System.
Human West Nile virus infections have been reported in EU Member States with known persistent transmission of West Nile virus in previous years. All human cases reported during the current transmission season have been reported in previously affected countries. 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 West Nile virus infections unless the results of an individual nucleic acid test are negative.

**Actions**

During the transmission season, ECDC publishes [West Nile virus infection maps](https://www.ecdc.europa.eu/en/publications-data/west-nile-virus-infection-maps) together with an epidemiological summary every Friday.

**Distribution of human West Nile virus infections by affected areas as of 25 July 2019**
Distribution of West Nile virus infections among humans and outbreaks among equids in the EU as of 25 July 2019.

**Epidemiological summary**

In July 2019, WHO and the Food and Drug Administration of the Philippines released an alert regarding three different falsified rabies vaccines (Verorab, Speeda and Rabipur) and one falsified anti-rabies serum (EquiRab) circulating in the Philippines. This alert is linked to a previously alert issued on 30 January 2019 regarding falsified Verorab rabies vaccine circulating in the Philippines.

WHO received confirmation that the falsified rabies vaccines and anti-rabies serum were available at patient level in the Philippines. Investigations and laboratory analyses are ongoing to determine their contents and better assess the risk to public health. So far, no adverse reactions attributed to these batches have been reported to WHO. In addition, there is an ongoing rabies vaccine shortage in the Philippines.

The notification provides information on how to distinguish the real vaccine from the fake versions. Authorities remind consumers, distributors and retailers to purchase drug products only from establishments licensed by the relevant regulatory agency.


**ECDC assessment**

Rabies can be found in dogs, bats and other mammals in the Philippines. The risk for EU/EEA travellers is very low if basic preventive measures are followed, such as avoiding contact with wild and domestic animals, including pets. At-risk groups such as travellers or professionals with activities in remote areas at risk of getting bitten by animals should be provided with an individual risk assessment by a healthcare provider. If a person has been bitten or scratched by dog, cat, bat or other mammal, it is advised to seek medical help immediately.

It is currently not known whether any EU/EEA citizens have been administered falsified rabies vaccines or anti-rabies serum in the Philippines. Travellers and tourists returning from the Philippines who have recently received rabies post-exposure prophylaxis should seek advice from a healthcare professional. Any possible adverse event should be reported to the national medicines
regulatory authorities.

Public health authorities may consider recommending revaccination of travellers and tourists returning from the Philippines who have received post-exposure prophylaxis when unsure whether the products used come from authentic and reliable sources. In the event of a vaccine dose delay, WHO recommends that post-exposure prophylaxis is resumed.

Actions

ECDC monitors this event through epidemic intelligence. ECDC is in contact with the WHO headquarters group on substandard and falsified medical products. A news item was published on this event by ECDC on 26 July 2019.

Poliomyelitis – Multistate (World) – Monitoring global outbreaks

Epidemiological summary

Wild poliovirus: In 2019 and as of 17 July 2019, 56 cases have been reported in two endemic countries: Pakistan (45) and Afghanistan (11). During the same period in 2018, 16 cases were reported.

Circulating vaccine-derived poliovirus (cVDPV): In 2019 and as of 17 July 2019, 36 cases of cVDPV2 have been reported in Nigeria (12), the Democratic Republic of the Congo (11), the Central African Republic (4), Somalia (3), Angola (3), China (1), Ethiopia (1) and Niger (1) and two cases of cVDPV1 have been reported by Myanmar. During the same period in 2018, 36 cases were reported.

Sources: Global Polio Eradication Initiative | ECDC | ECDC Polio interactive map

ECDC assessment

The WHO European Region has remained polio-free since 2002. Inactivated polio vaccines are used in all EU/EEA countries. The risk of reintroduction of the virus in Europe exists as long as there are non- or under-vaccinated population groups in European countries and poliomyelitis is not eradicated.

ECDC link: ECDC comment on risk of polio in Europe | ECDC risk assessment

Actions

ECDC provides updates on the polio situation on a monthly basis. ECDC monitors reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identifies events that increase the risk of reintroducing wild poliovirus in the EU.

ECDC maintains an interactive map showing countries that are still endemic for polio and have ongoing outbreaks of cVDPV.


Epidemiological summary

In the Democratic Republic of the Congo, since the beginning of the outbreak a year ago and as of 24 July 2019, there have been 2 620 Ebola virus disease cases (2 526 confirmed, 94 probable), including 1 762 deaths (1 668 confirmed, 94 probable), according to the WHO and Ministry of Health of the Democratic Republic of the Congo. This includes the three cases and three deaths that were previously reported having travelled to Uganda. Beni is currently the most active health zone.

As of 24 July 2019, 141 healthcare workers have been infected.

Twenty-five health zones in two provinces have reported confirmed or probable Ebola virus disease cases: Alimbongo, Beni,
Biena, Butembo, Goma, Kalunguta, Katwa, Kayna, Kyondo, Lubero, Mabalako, Manguredjipa, Masereka, Mutwanga, Musienene, Oicha and Vuhovi Health Zones in North Kivu Province and Ariwara, Bunia, Mambasa, Nyankunde, Komanda, Mandima, Rwampra and Tchomia Health Zones in Ituri Province.

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 geographic spread observed in recent weeks, as well as the need for a more intensified and coordinated response in order to end this outbreak.

Sources: Ebola dashboard Democratic Republic of the Congo | WHO | WHO Regional Office for Africa

ECDC assessment

ECDC assessment: Implementing response measures remains challenging in the affected areas because of the prolonged humanitarian crisis, 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 cross-border population flow with Rwanda, South Sudan and Uganda remains of particular concern. Recent case movements from Beni to non-affected areas are not unexpected. So far, the identification of these imported cases or the PHEIC does not change the overall risk for the EU/EEA, which remains very low.

However, the risk can only be eliminated by stopping transmission at the local level.

WHO assessment: As of 25 July 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 recent case in Goma, as the city is a provincial capital with an airport serving international flights connecting to several countries in Africa, including the Republic of the Congo, Ethiopia, Uganda and Zambia).

Actions

ECDC published an epidemiological update on 13 June 2019 and the fifth update of a rapid risk assessment on 19 July 2019.
Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 24 July 2019

Source: ECDC

Distribution of confirmed and probable cases of Ebola Virus Disease, North Kivu and Ituri, Democratic Republic of the Congo, as of 24 July 2019

Source: ECDC

Cholera – Multistate (World) – Monitoring global outbreaks
Epidemiological summary

**Americas**

**Dominican Republic:** In 2019 and as of 29 June 2019, the Dominican Republic has reported 12 cases and no associated deaths. This represents six new cases since the previous CDTR update. During the same period in 2018, the Dominican Republic reported 18 cases.

**Haiti:** In 2019 and as of 6 July 2019, Haiti has reported 458 cases, including three deaths (CFR: 0.7%). This represents an increase of 240 cases and no deaths since the previous CDTR update. In 2018, Haiti reported 3 777 cholera cases, including 41 deaths (CFR: 1.1%). Since the beginning of the outbreak in 2010 and as of 6 July 2019, Haiti has reported 820 235 suspected cases, including 9 792 deaths (CFR: 1.2%).

**Africa**

**Benin:** In July 2019, a cholera outbreak has been reported in Benin. So far and as of 15 July 2019, nine cases with no deaths associated have been reported in the Atlantique Department. Among these cases, four have been confirmed for *Vibrio cholerae* 01.

**Burundi:** In June 2019, a cholera outbreak has been reported in Burundi. Between 1 June to 11 July, 124 cases with no deaths associated have been reported in Bujumbura Mairie and Cibitoke provinces. Among these cases, 32 have been confirmed for *Vibrio cholerae* Ogawa.

**Cameroon:** As of 13 July 2019, Cameroon has reported 1 194 cases, including 66 associated deaths (CFR: 5.5%), since the beginning of the outbreak, with the most recent cases reported in the northern part of the country. This represents an increase of 134 cases and two deaths since the previous CDTR update.

**Democratic Republic of the Congo:** In 2019 and as of 30 June 2019, the Democratic Republic of the Congo reported 13 400 suspected cases, including 280 deaths (CFR: 2.1%). This represents an increase of 2 931 cases and 39 deaths since the previous CDTR update. In 2018, 31 387 cases, including 1 042 deaths, were notified across the country. In addition, the largest-ever cholera oral vaccination campaign targeting 1.2 million people was scheduled for July 2019 in Kasai, Kasai Oriental, Lomami and Sankuru Provinces.

**Ethiopia:** As of 23 June 2019 and since the beginning of the outbreak in May 2019, 688 cases, including 15 associated deaths (CFR: 2.2%), have been reported in Ethiopia. This represents an increase of 264 cases since the previous CDTR update. Among these cases, 23 were laboratory-confirmed. Five regions and two administrative cities are reporting cases: Addis Ababa, Afar, Amhara, Dire Dawa, Oromia, Somali and Tigray.

**Kenya:** In 2019 and as of 14 July 2019, 3 433 cases, including 24 associated deaths (CFR: 0.7%), have been reported. The active outbreak continues in Garissa, Kajiado, Machakos, Mombasa, Nairobi and Wajir Counties. This represents an increase of 1 296 cases and 10 deaths since the previous CDTR update.

**Mozambique:** In 2019 and as of 19 June 2019, WHO has reported 7 052 cases, including eight associated deaths (CFR: 0.1%), in Mozambique, an increase of 313 cases since the previous CDTR update.

**Nigeria:** In 2019 and as of 28 June 2019, Nigeria has reported 156 cases, including one associated death (CFR: 0.6%), since the beginning of the outbreak in May 2019. Among the cases, 16 were laboratory-confirmed. Cases have been reported in three regions: Girei, Yola North and Yola South.

**Somalia:** As of 30 June 2019, WHO has reported 7 802 suspected cases, including 46 associated deaths (CFR: 0.6%), since December 2017, an increase of 567 cases and no deaths since the previous CDTR update.

**Tanzania:** In 2019 and as of 14 July 2019, Tanzania reported 424 cases, including eight associated deaths (CFR: 1.9%), an increase of 147 cases and three deaths since the previous CDTR update. The last case reported in Zanzibar was on 11 July 2017.

**Uganda:** The Ministry of Health in Uganda declared an outbreak in the country on 24 June 2019. So far, 11 cases with no associated deaths have been reported in Bududa District neighbouring Kenya.

**Zambia:** WHO considers the outbreaks in Zambia closed. From April–June 2019, 312 cases, including six associated deaths (CFR: 1.9%), were reported in Northern Province. The last case reported was on 6 June 2019.
**Zimbabwe**: WHO considers the outbreaks in Zimbabwe closed. From September 2018–March 2019, 10,421 cholera cases, including 69 associated deaths (CFR: 0.7%), were reported across the country. The last case reported was on 12 March 2019.

**Asia**

**Yemen**: Since the beginning of the outbreak and as of 17 July 2019, Yemen reported 1,893,708 suspected cases and 3,486 deaths (CFR: 0.2%), an increase of 125,231 cases and 96 deaths since the last CDTR update.

**ECDC assessment**

Cholera cases continue to be reported in East Africa, the Gulf of Aden and the Horn of Africa over the past few months. Cholera outbreaks have also been notified in West and southern Africa. Despite the number of cholera outbreaks reported worldwide, few cases are reported each year among returning EU/EEA travellers. In this context, the risk of cholera infection in travellers visiting these countries remains low even though sporadic importation of cases in the EU/EEA remains possible. In 2017, 17 cases were reported in the EU/EEA Member States, while 23 cases were reported in 2016 and 24 in 2015. All cases had travel history to cholera-affected areas.

According to WHO, vaccination should be considered for travellers at higher risk, such as emergency and relief workers who are likely to be directly exposed. Vaccination is generally not recommended for other travellers.

Travellers to cholera-endemic areas should seek advice from travel health clinics to assess their personal risk and apply precautionary sanitary and hygiene measures to prevent infection. These can include drinking bottled water or water treated with chlorine, carefully washing fruit and vegetables with bottled or chlorinated water before consumption, regularly washing hands with soap, eating thoroughly cooked food and avoiding the consumption of raw seafood products.

**Actions**

ECDC monitors cholera outbreaks globally through epidemic intelligence activities in order to identify significant changes in epidemiology and inform public health authorities. Reports are published on a monthly basis.

**Geographical distribution of cholera cases reported worldwide in 2019**

[Image of world map showing cholera cases]

*Cholera cases*

- 10
- 1,000
- 100,000

**Affected countries**

*Date of production: 25/07/2019*
Geographical distribution of new cholera cases reported worldwide between May to July 2019

ECDC

Date of production: 25/07/2019
The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.