European Antibiotic Awareness Day: ECDC point prevalence surveys show sources of unnecessary use of antimicrobials in hospitals and in long-term care facilities

Healthcare-associated infections remain a serious issue in the EU/EEA, with 8.9 million occurring each year in both hospitals and long-term care facilities. ECDC estimates that on any given day one in 15 patients in European hospitals, and one in 26 residents in long-term care facilities, have at least one healthcare-associated infection. Many of them were caused by multidrug-resistant bacteria.

In hospitals, the proportion of broad-spectrum antimicrobials used varied from 16% to 62% across Europe. These medicines are not always necessary and their use drives antimicrobial resistance. More than 50% of antimicrobials given to patients in relation with surgical procedures lasted more than one day, although continuing antimicrobial prophylaxis after the end of intervention is not recommended.

In long-term care facilities, 29% of antimicrobials were prescribed for prophylaxis, and 74% of those courses were given to prevent urinary tract infections. While this might reduce the risk of infection in women, there is no evidence about its effectiveness when applied widely to elderly patients.

Data from the European Surveillance of Antimicrobial Consumption Network (ESAC-Net) show that from 2013 to 2017, Finland, Germany, Italy, Luxembourg, the Netherlands, Norway, Sweden and the United Kingdom had decreasing trends of antimicrobial consumption in the community. Croatia and Malta showed increasing trends in the hospital sector. No statistically significant change for the EU/EEA overall in these two settings.

Data from the European Antimicrobial Resistance Surveillance Network (EARS-Net) for 2017 reveal wide variations depending on the bacterial species, antimicrobial group and geographical region. For several bacterial species and antimicrobial group combinations, a north-to-south and west-to-east gradient is evident. In general, lower resistance percentages were reported by countries in the north while higher percentages were reported in the south and east of Europe.

European Antibiotic Awareness Day (EAAD) is a European health initiative coordinated by ECDC marked on the 18 November. It provides a platform and support for national campaigns on the prudent use of antibiotics. Prudent use means only using antibiotics when they are needed, with the correct dose, dosage intervals and duration of the course.

- Most recent data on antimicrobial consumption are available on the ESAC-Net interactive database (1997?2017).
- Country-specific data on Antimicrobial resistance in Europe are available in the ECDC Atlas.
- About the studies: "ECDC calls for continued action to address antimicrobial resistance in healthcare settings"

I. Executive summary
EU Threats

West Nile virus - Multistate (Europe) - Monitoring season 2018
Opening date: 30 May 2018
Latest update: 16 November 2018

During the West Nile virus transmission season (expected to be between June and November 2018), 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 2 (Global Administrative Unit Layers 2) level where there is ongoing virus transmission.

Update of the week

Between 9 and 15 November 2018, EU Member States reported two human West Nile virus (WNV) infections in France (1) and Romania (1). The most recent onset dates are from week 43 (22 to 28 October). EU neighbouring countries reported 23 cases in Israel (18) and Serbia (5).

All human cases were reported from areas that have been affected during previous transmission seasons. This week no deaths were reported.

In the same week, three outbreaks among equids were reported by Austria (1), Italy (1) and Hungary (1).

Influenza – Multistate (Europe) – Monitoring season 2018 – 2019
Opening date: 8 October 2018
Latest update: 16 November 2018

Influenza transmission in Europe shows a seasonal pattern, with peak activity during the winter months. So far this season, influenza viruses were detected sporadically in specimens from persons with respiratory illness presenting to medical care. Both influenza A and B type viruses were detected.

Update of the week

For week 45 between 5 to 11 November 2018, influenza activity was low throughout Europe.

Non EU Threats

Ebola virus disease - tenth outbreak - Democratic Republic of the Congo - 2018
Opening date: 1 August 2018
Latest update: 16 November 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 affects North Kivu and Ituri Provinces in the northeast of the country close to the border with Uganda. On 17 October 2018, the International Health Regulations (IHR) Emergency Committee concluded that the epidemic does not at this stage constitute a public health emergency of international concern.

Update of the week

Since the previous CDTR, the Ministry of Health of the Democratic Republic of the Congo has reported 32 additional cases. Additionally, new confirmed cases have been reported in two new health zones: Katwa, an area bordering Butembo, and Kyondo.

The first cases reported from Kyondo health zone were exposed through contact with cases in Butembo.

As of 14 November 2018, there have been 344 Ebola virus disease cases (304 confirmed, 40 probable), including 202 deaths (162 of which were confirmed cases), since the beginning of the outbreak. The Ministry of Health of the Democratic Republic of the Congo are currently conducting data cleaning of the Ebola virus disease databases. Accordingly, the figures reported will likely change over the coming days as cases are reclassified.

During the past week, a review and reconciliation of case records was conducted. This review resulted in the addition of 16 probable cases, invalidation of 11 past deaths previously reported as probable cases and exclusion of duplicate confirmed cases. In addition, some confirmed and probable cases were recategorised to health zones where their infection most likely occurred, as opposed to the location of the Ebola virus disease treatment centre where they were admitted, and 16 confirmed case deaths (deaths and listing errors) were cleaned.
II. Detailed reports

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

Opening date: 30 May 2018
Latest update: 16 November 2018

Epidemiological summary

Between 9 and 15 November 2018, EU Member States reported two human West Nile virus (WNV) infections in France (1) and Romania (1). The most recent onset dates are from week 43, 22 to 28 October. EU neighbouring countries reported 23 cases in Israel (18) and Serbia (5).

All human cases were reported from areas that have been affected during previous transmission seasons. No deaths were reported this week.

In the same week, three outbreaks among equids were reported by Austria (1), Italy (1) and Hungary (1).

In 2018, as of 15 November 2018, EU Member States have reported 1 491 human cases in Italy (569), Greece (309), Romania (277), Hungary (214), Croatia (53), France (25), Austria (20), Bulgaria (15), the Czech Republic (5), Slovenia (3) and Cyprus (1). EU neighbouring countries reported 557 human cases in Serbia (415), Israel (128) and Kosovo* (14). To date, 171 deaths due to West Nile virus infection have been reported by Greece (45), Italy (42), Romania (42), Serbia (35), Kosovo* (3), Bulgaria (2), the Czech Republic (1) and Hungary (1).

During the current transmission season, 279 outbreaks among equids have been reported by Italy (145), Hungary (91), Greece (15), France (13), Spain (7), Austria (2), Romania (2), Germany (2), Slovenia (1) and Portugal (1).

In accordance with European Commission Directive 2014/110/EU, prospective blood donors should be deferred for 28 days after leaving an area with evidence of WNV circulation among humans unless the results of an individual nucleic acid test are negative.

*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 Heath 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 previous years. Mosquito-borne autochthonous human cases were reported in previously affected countries. Since it has been a particularly intense transmission season for West Nile virus, precautionary measures for travellers and residents, mainly the elderly and immunocompromised individuals, to affected areas must be highlighted. As expected at this time of the year, the weekly number of cases are decreasing.

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 and the latest epidemiological update on 24 September 2018.
Distribution of human West Nile virus infections by affected areas as of 15 November 2018.

Distribution of West Nile virus infections among humans and outbreaks among equids in the EU as of 15 November 2018.

Influenza – Multistate (Europe) – Monitoring season 2018 – 2019
**Ebola virus disease - tenth outbreak - Democratic Republic of the Congo - 2018**

### Epidemiological summary

**Week 45, 2018, 5 to 11 November 2018**

Influenza activity was low throughout the European Region. Influenza viruses were detected sporadically in specimens from persons with respiratory illness presenting to medical care. Both influenza A and B type viruses were detected in low numbers.

For week 45, 2018, data from the 22 Member States and areas reporting to the EuroMOMO project indicated all-cause excess mortality to be at expected levels for this time of the year.

### ECDC assessment

As is usual for this time of the year, influenza activity has been low since week 40, 2018, in the European Region.

**Source:** [Flu News Europe](https://flu-news-europe.org) | [EuroMOMO](https://www.euro-momo.org)

### Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the [Flu News Europe website](https://flu-news-europe.org).

Recommendations on the composition of the 2018–2019 influenza virus vaccine are available from [WHO](https://www.who.int).

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

**Opening date:** 1 August 2018  
**Latest update:** 16 November 2018

### Epidemiological summary

As of 14 November 2018, there have been 344 Ebola virus disease cases (304 confirmed, 40 probable), including 202 deaths (162 of which were confirmed cases), since the beginning of the outbreak.

Fourteen health zones in two provinces have reported confirmed or probable Ebola virus disease cases: Beni, Butembo, Mabalako, Masereka, Mutwanga, Musienene, Oicha, Kalungata, Katwa, Kyondo and Vuhovi health zones in North Kivu Province and Komanda, Mandima and Tchomia Health Zones in Ituri Province.

**Response activities:** According to the WHO Regional Office for Africa Situation Report, as of 13 November 2018, 4,636 contacts have been identified in Alimbongo (57), Beni (2,644), Butembo (1,03), Kalunguta (793), Katwa (405), Kyondo (71), Mabalako (163), Masereka (79), Musienene (53), Mutwanga (92) and Vuhovi (176). A total of 93% of these contacts were followed up.

According to the latest Ministry of Health update, as of 14 November 2018, 30,563 people have been vaccinated in Beni (15,573), Mabalako (4,544), Katwa (2,742), Mandima (1,663), Butembo (1,565), Kalunguta (1,547), Masereka (732), Bunia (434), Tchomia (355), Vuhovi (293), Mutwanga (292), Komanda (240), Musienene (210), Oicha (178), Kyondo (161) and Alimbongo (34).

**Travel:** [Uganda](https://www.who.int)’s Ministry of Health, with support from WHO, has started vaccinating frontline health workers against Ebola virus disease. Vaccination of frontline health workers started in Kasese district on 13 November 2018. After Kasese, the vaccination teams will move to Bundibugyo, Bunyangabu and Kabarole districts. Other Ebola virus disease preparatory activities are ongoing.

[South Sudan](https://www.who.int) is one of the countries prioritised by WHO to enhance preparedness and operational readiness and has activated a multisectoral Ebola virus disease task force to coordinate preparedness and response activities. The Ministry of Health, along with WHO and other partners, are working towards strengthening multisectoral preparedness for Ebola virus disease.

Furthermore, [Burundi](https://www.who.int), [Rwanda](https://www.who.int) and [Zimbabwe](https://www.who.int) have established entry screening. According to [WHO](https://www.who.int), as of 11 November 2018, health screening was reported from 57 of 67 points of entry.

[Belgium](https://www.who.int), [Germany](https://www.who.int), [Italy](https://www.who.int), [Spain](https://www.who.int) and the [United Kingdom](https://www.who.int) have issued advice against traveling to the North Kivu region due to the Ebola outbreak. Additionally, the [CDC](https://www.cdc.gov) and [WHO](https://www.who.int) have issued travel recommendations.
**ECDC assessment**

**ECDC assessment:** The compassionate use of the Ebola virus disease vaccine and experimental treatments support response efforts. However, the implementation of response measures in outbreak areas remains challenging because of the prolonged humanitarian crisis, unstable security situation arising from a complex armed conflict and mistrust in the population to response teams. The number of outbreak cases and affected areas increasing and it is unlikely that the outbreak will be controlled in the near future.

While no confirmed cases in neighbouring countries have been documented so far, the fact that the outbreak is ongoing in areas with an important cross-border population flow with Rwanda and Uganda remains of particular concern.

The probability that EU/EEA citizens who live or travel in EVD-affected areas of DRC are exposed to the disease is low, provided they adhere to the precautionary measures. The overall risk of introduction and further spread of Ebola virus within the EU/EEA is very low. However, the risk can only be eliminated by stopping transmission on a local level.

**WHO Assessment:** As of 13 November 2018, the [WHO assessment](https://www.who.int) states that the risk of spread is low at global level, but remains very high at national and regional levels.

**Actions**


Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 14 November 2018
Distribution of confirmed and probable cases of Ebola Virus Disease, North Kivu and Ituri, Democratic Republic of the Congo, as of 14 November 2018.

* The Ministry of Health is currently conducting data cleaning. These figures are likely to change over the next coming days as cases are reclassified.
The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.