Epidemiological update: West Nile virus transmission season in Europe, 2019

Epidemiological update

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Human cases

As of 4 December 2019, European Union (EU) Member States and EU neighbouring countries reported 463 human infections in 2019. EU Member States reported 410 cases: 223 in Greece, 66 in Romania, 53 in Italy, 36 in Hungary, 16 in Cyprus, 5 in Bulgaria, 4 in Austria, 4 in Germany, 2 in France and 1 in Slovakia. EU neighbouring countries reported 53 human cases: 27 in Serbia, 10 in Israel, 10 in Turkey and 6 in North Macedonia. In the same time period, 50 deaths due to West Nile virus infections have been reported.

In 2019, the first cases in the EU were notified by Greece and Romania in week 29 (15 to 21 July) with the earliest disease onset reported by Greece from week 25 (17 to 23 June). In the EU neighbouring countries the first case was reported by Serbia with a date of onset from week 28 (8 to 14 July).

The last cases of this transmission season were reported by Italy in week 46 (11 to 17 November), with the latest date of onset from week 37 (9 to 15 September). Romania reported the case with the latest date of onset in the EU from week 43 (21 to 27 October). This is comparable with previous years (2013 – 2017), but three weeks earlier than 2018 when the season ended unusually late. The latest date of onset in the EU neighbouring countries this transmission season was reported by North Macedonia from week 38 (16 to 22 September).

Thirteen travel-related cases of West Nile virus infection were reported this transmission season. Eleven were associated with travel within the EU or EU neighbouring countries. One case was associated with a travel to Tunisia and one to the United States.

During this transmission season, both Germany and Slovakia reported their first autochthonous mosquito-borne West Nile virus infection. This was not unexpected as the presence of West Nile virus among birds, equids and/or mosquitoes have been previously documented in those countries. All other human infections were reported in countries with known persistent transmission season in previous years.

Animal outbreaks

Since September 2019, ECDC started to include West Nile virus infections among birds in addition to human and equine infections in its epidemiological updates. Animal data (including outbreaks among equids and birds) are collected through the Animal Disease Notification System (ADNS) of the European Commission. While the report of equine encephalomyelitis due to WNV is mandatory at the EU level, the report of WNV infections among birds is voluntary. The distribution of human cases covers EU/EEA Member States and EU neighbouring countries, whereas outbreaks among equids and birds covers only EU/EEA Member States.

During the 2019 transmission season, 93 outbreaks among equids were reported by EU Member States through the Animal Disease Notification System (ADNS): 31 in Germany, 21 in Greece, 13 in France, 8 in Italy, 7 in Hungary, 6 in Spain, 4 in Austria and 3 in Portugal.

In addition, 54 outbreaks among birds have been reported to ADNS by Germany (53) and Greece (1).