In 2017, for the first time, ECDC included equine West Nile fever cases in its epidemiological updates. During the 2017 transmission season, 204 human cases and 127 equine cases were reported in the European Union.

Between 20 and 26 July 2018, 37 cases of human West Nile fever were reported in the EU/EEA by Italy (20), Greece (10), Hungary (4) and Romania (3). Of note 19 cases in Italy, of which one was fatal, were reported in Veneto Region. In EU neighboring countries, 12 cases were reported by Serbia, including three deaths. All human cases were reported from regions that have been affected during previous transmission seasons.

Since the beginning of the 2018 transmission season, as of 26 July 2018, 56 human cases have been reported in EU/EEA Member States by Greece (22), Italy (24), Romania (5) and Hungary (5). Forty-one human cases have been reported in EU neighboring countries, all by Serbia, including three deaths. During the current transmission season, outbreaks among equids have been reported by Hungary (2), Greece (1) and Italy (1).

West Nile Virus (WNV) is a member of the flavivirus genus and belongs to the Japanese encephalitis antigenic complex of the family Flaviviridae. Infection is transmitted to humans by bites from infected mosquitoes (Culex), which acquire the virus when they feed on infected birds. During later blood meals, infected mosquitoes can inject WNV to humans and animals, such as horses. Horses, just like humans, are “dead-end” hosts, meaning that while they become infected, they do not spread the infection. No human-to-human transmission of WNV has been documented; no transmission to healthcare workers has been reported.

There is no human vaccine against WNV. Prevention is based on active animal health surveillance system to detect new cases in birds and horses; the only way to reduce infection in people is by raising awareness of the risk factors and educating people about the measures they can take to reduce exposure to the virus. Protection against mosquitoes bites; reducing the risk of animal-to-human transmission by wearing gloves and other protective clothing while handling sick animals or their tissues; laboratory testing on blood donation at the time of the outbreak in the affected areas; vector control are currently the main preventive measures.

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