

Weekly Epidemiological Report on West Nile Fever in Macedonia in 2026 As of August 11, 2026

This weekly epidemiological report provides a brief overview of epidemiological data on West Nile fever (WNV), reported cases, and the response of public health authorities in Macedonia in 2026.

The data presented in this report were obtained from notifications of human WNV infection cases submitted to the Institute of Public Health (IPH) by physicians (infectious disease specialists), epidemiological investigations conducted by epidemiologists from the competent Centers for Public Health (CPH), and notifications from laboratories testing samples for this disease.

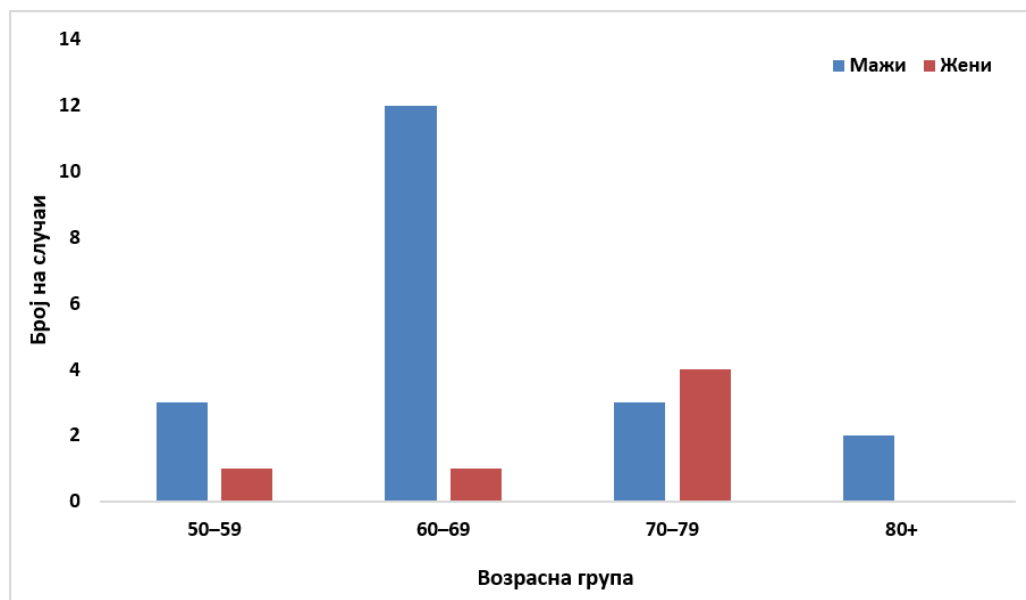
The Department of Epidemiology of Infectious Diseases at the IPH conducts verification and classification procedures and investigates all reported cases within 24 hours through communication with CPH epidemiologists, treating physicians, and patients. The aim is to identify the probable place of exposure, disease characteristics, and risk factors. In addition, the health status/outcome of hospitalized cases is updated daily.

Epidemiological situation in 2026

In 2026, as of August 11, 2026, a total of 26 cases of West Nile fever have been registered in Macedonia.

- Of the registered cases, according to the case definition, 24 are classified as confirmed and 2 as probable cases.
- Geographically, 25 cases are from Skopje and 1 from Veles.
- 25 cases are considered autochthonous, while one case has a history of travel to Greece; however, the incubation period also includes a period of stay in Macedonia.
- Of the 26 registered cases, 20 are male and 6 are female.
- Regarding age distribution, the majority are people over 60 years of age (22 cases), while 4 cases are among people aged 50–59 years. The mean age is 66.6 years (SD $\pm$ 9 years; minimum 51, maximum 83).

Figure 1. Distribution of WNV cases by sex and age, Macedonia, 2026, as of August 11, 2026



Clinical characteristics

- All registered cases in 2026 involve neuroinvasive disease (encephalitis and/or meningitis), and all patients were hospitalized.
- 25 patients were hospitalized at the University Clinic for Infectious Diseases and Febrile Conditions, while one was hospitalized at Acibadem Sistina.
- The onset of symptoms in the majority of cases—17 cases—was recorded in July.
- In 6 cases, symptoms began in August; in 2 cases, in June; and in 1 case, in May.

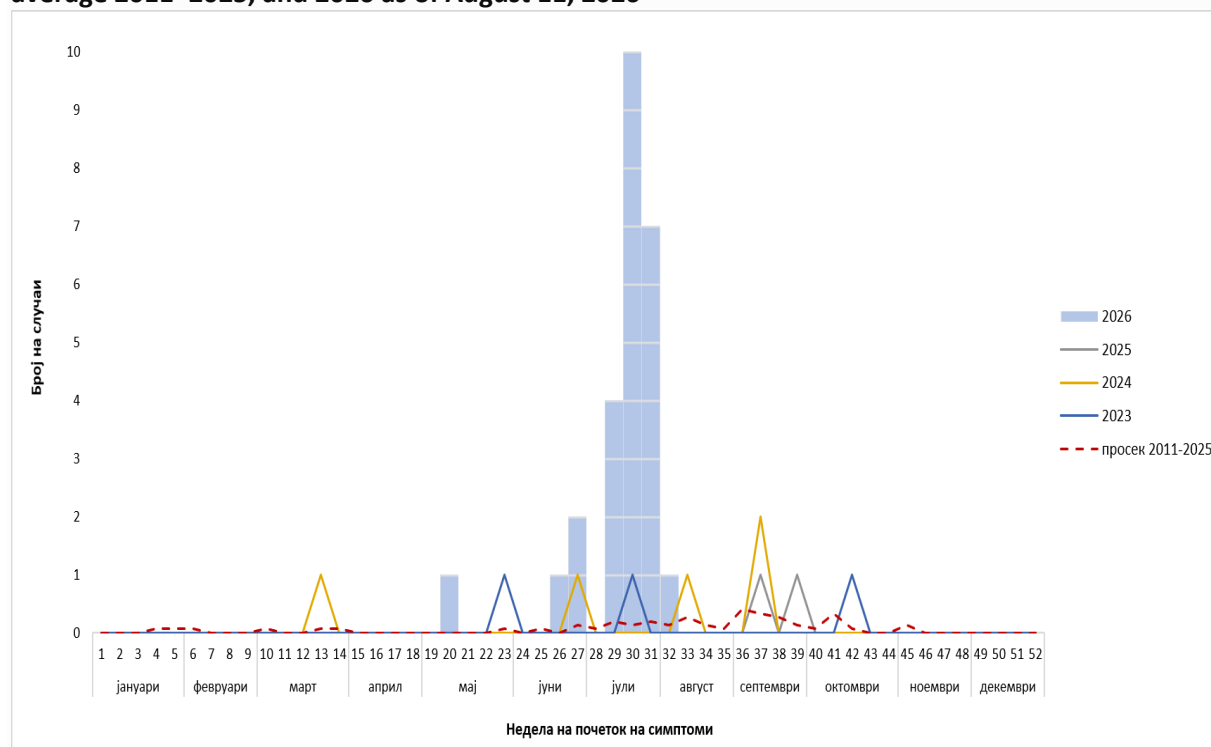
Fatal outcome

During 2026, up to August 11, one fatal case of neuroinvasive West Nile fever was registered. The patient was a male over 80 years of age from Skopje, who was hospitalized at the University Clinic for Infectious Diseases and Febrile Conditions. Symptoms—including fever, chills, headache, general weakness, joint and muscle pain, neck stiffness, and altered consciousness—began on August 2, 2026. The patient was diagnosed with meningitis and had documented comorbidities. The diagnosis was confirmed by serological testing of cerebrospinal fluid (CSF).

New cases during the past week

During the past week, up to August 11, 2026, 13 new cases were reported. On August 11, 2026, the Skopje Center for Public Health reported an outbreak of West Nile fever in the municipalities of Kisela Voda, Gazi Baba, Aerodrom, and Butel. Figure 2 presents reported WNV cases by epidemiological week of symptom onset in 2026, compared with the previous three years (2023–2025) and the historical average. The first diagnosed WNV infection in 2026 had a reported symptom onset date of May 12, 2026 (week 20 of 2026).

Figure 2. Number of reported WNV cases by week of symptom onset, Macedonia, 2023, 2024, 2025, average 2011–2025, and 2026 as of August 11, 2026



Epidemiological interpretation

The data indicate an increase in the number of registered cases during July and early August 2026, with a pronounced geographical concentration in the Skopje region.

The largest number of cases has been registered in the municipality of Kisela Voda, particularly in the area of the settlement of Drachevo, as well as in the municipality of Gazi Baba, with a concentration in rural areas.

The observed increase in cases and their geographical concentration are indicative of intensified local transmission of WNV in the affected areas.

The table below presents the geographical distribution of laboratory-diagnosed WNV infections according to the probable municipality of exposure.

The probable place of exposure is an indirect indicator of possible local circulation of WNV and should not be interpreted as a confirmed location where the infection was acquired.

Table 2. Reported WNV infection cases by probable municipality of exposure, Macedonia, 2026, as of August 11, 2026 (n=26)

Region	Unit	Probable municipality of exposure	Number of cases	Incidence per 100,000
Skopje	City of Skopje	Kisela Voda	11	17.8
		Gazi Baba	6	8.6
		Aerodrom	1	1.3
		Butel	1	2.6
	Municipalities surrounding the City of Skopje	Ilinden	1	5.7
		Zelenikovo	1	29.8
		Petrovec	1	10.9
		Sopishte	2	29.8
		Veles	1	2.1
		Dolneni	1	7.6
			26	1.4
Vardar	Veles	Veles	1	2.1
Pelagonia	Dolneni	Dolneni	1	7.6
Total			26	1.4

* According to the data from the epidemiological investigations, the incubation period and the person's stay in a particular municipality may differ from the municipality where the patient resides.

PUBLIC HEALTH MEASURES SUPPORTED BY THE INSTITUTE OF PUBLIC HEALTH (IPH), 2026

1. Educating the population on methods of transmission and personal protection measures

- For this purpose, the Institute of Public Health (IPH) has prepared informational and educational materials on vector-borne diseases, including West Nile fever, covering disease prevention methods, as well as a flyer with measures for protection against mosquitoes.
- The materials have been submitted to the relevant institutions. The educational materials should be published on the websites of the IPH and the 10 Centers for Public Health (CPH). The CPHs should also distribute the materials to travel agencies for sharing with travelers visiting regions where the disease is endemic.

2. Raising awareness among healthcare workers about West Nile fever and strengthening surveillance

- CPHs should inform general practitioners, neurologists, pediatricians, and infectious disease specialists working in healthcare institutions throughout the country about the occurrence of the disease, in order to raise awareness of its possible occurrence and ensure that it is included in the differential diagnosis.
- Laboratory testing for West Nile fever is recommended in suspected cases with a neuroinvasive form, such as cases of encephalitis, aseptic meningitis, acute flaccid paralysis, or fever of undetermined etiology.
- Maintain daily communication with laboratories conducting testing for West Nile fever as part of active surveillance.
- Investigate all reported cases to determine the probable place of exposure, risk factors, and severity of the disease.
- Maintain communication with hospitals so that the health status of hospitalized cases is updated daily.
- Maintain communication with the Institute of Transfusion Medicine to implement targeted measures for blood safety.

3. Communication with the public and relevant institutions

- The IPH should provide regular updates to all relevant institutions regarding the epidemiological situation.
- A periodic/weekly epidemiological report on West Nile fever should be prepared by the IPH and published on its website.
- Maintain communication with international institutions, including the European Centre for Disease Prevention and Control (ECDC), through reporting in EpiPulse.

4. Planned implementation of preventive disinfection

Preventive disinfection should be carried out according to the relevant operational plan, including:

- Larvicidal and adulticidal mosquito control implemented by municipalities;
- Larvicidal and adulticidal disinfection based on epidemiological indications following the registration of cases, which falls under the responsibility of the Centers for Public Health within their respective areas of jurisdiction.

The IPH monitors and reports on preventive disinfection activities conducted by local government units based on data submitted by the 10 Centers for Public Health. The IPH reports to the relevant institutions on:

- the type of activity carried out;
- the product/agent used;
- the period during which the activity was conducted; and
- the operator that carried out the activity.

Prevention of Mosquito-Borne Diseases

1. Environmental measures

Measures aimed at reducing mosquito populations and their presence in areas where people live

Prevent mosquito breeding in your surroundings:

- Do not leave open containers with water, such as flowerpot saucers, barrels, buckets, boats, or old tires in yards, where rainwater can accumulate.
- Clean gutters regularly to ensure proper drainage of water.
- Keep swimming pools, decorative pools, and fountains clean.
- Do not allow puddles or stagnant water to accumulate in yards.
- Regularly maintain areas alongside water channels and around other bodies of water.

Reduce the risk of mosquito bites:

- Install protective screens on doors and windows at home.
- Avoid going outdoors and staying outside at dawn or dusk, when mosquitoes are most active. Particular care should be taken when watering green areas and gardens and carrying out gardening activities, which are commonly performed during these periods of the day.
- If poultry and/or pet birds are kept at home, maintain good hygiene in the areas where they are housed. Where possible, protect their enclosures with screens, keep them clean, and change the water in their drinking containers regularly to prevent mosquito breeding.

2. Personal protection against mosquito bites

- Wear appropriate clothing, preferably light-colored, that leaves as little skin exposed as possible, such as long sleeves, trousers, socks, and hats.
- Use mosquito repellents in the form of lotion, stick, aerosol spray, or cream for application to the skin and clothing.
- Repellents should not be applied to cuts, open wounds, under clothing, or around the eyes and mouth. For young children, use should be in accordance with the instructions for the specific product.
- Travelers visiting countries or areas where mosquito-borne diseases are reported should use repellents throughout their stay. Windows and sleeping areas should be protected with screens or mosquito nets treated with an appropriate insecticide.
- If symptoms of illness develop, seek medical attention immediately and inform the doctor about any recent stay in areas where mosquito-borne diseases are endemic. If symptoms occur, particularly neurological symptoms, seeking medical care promptly allows timely diagnostic assessment, appropriate treatment, and patient monitoring.

CONCLUSION

West Nile fever was first registered in Macedonia in 2011. From 2011 through the end of 2025, a total of 54 laboratory-confirmed cases were registered. During the same period, five deaths associated with the disease were recorded.

In 2026, there has been a significant increase compared with the total number of cases recorded during 2011–2025. Twenty-six of the 80 total cases (32.5%) registered in Macedonia from 2011 to the present have occurred in 2026 alone.

In 2026, Macedonia has recorded a significant increase in the number of WNV cases compared with previous years. Cases are predominantly concentrated in the Skopje region, with the highest number reported in the municipalities of Kisela Voda and Gazi Baba.

The temporal distribution shows intensified transmission during July and early August. The geographical and temporal concentration of cases, together with the reported outbreak in the municipalities of Kisela

Voda, Gazi Baba, Aerodrom, and Butel, indicates active local circulation of WNV and the need for continued enhanced epidemiological surveillance and vector-control measures.

Epidemiological surveillance of the disease, systematic and early implementation of mosquito-control programs, and personal protection measures against mosquito bites are considered the most appropriate measures for controlling West Nile fever.

Because the circulation of the virus and its geographical distribution—that is, the areas where human cases are registered—cannot be predicted, personal protection measures against mosquito bites are encouraged throughout the period of mosquito activity.

Informational and educational materials prepared by the Institute of Public Health (IPH):

<https://www.iph.mk/mk/news/index/1783>

<https://www.iph.mk/mk/news/index/1762>

West Nile virus situation in Europe

According to the latest available information on West Nile fever from the European Centre for Disease Prevention and Control (ECDC), from the beginning of the 2026 transmission season through August 5, 2026, 59 regions affected by West Nile virus (WNV) were identified in seven European countries.

These regions are located in:

- Italy – 36 regions
- Greece – 9 regions
- Romania – 6 regions
- Macedonia – 3 regions
- Spain – 2 regions
- France – 2 regions
- Germany – 1 region

The seven countries reported a total of 241 locally acquired (autochthonous) cases of West Nile virus infection:

- Italy – 139 cases
- Greece – 61 cases
- Spain – 17 cases
- Macedonia – 13 cases
- Romania – 6 cases
- France – 4 cases
- Germany – 1 case

Map: Regions with West Nile virus circulation in Europe



West Nile virus infection

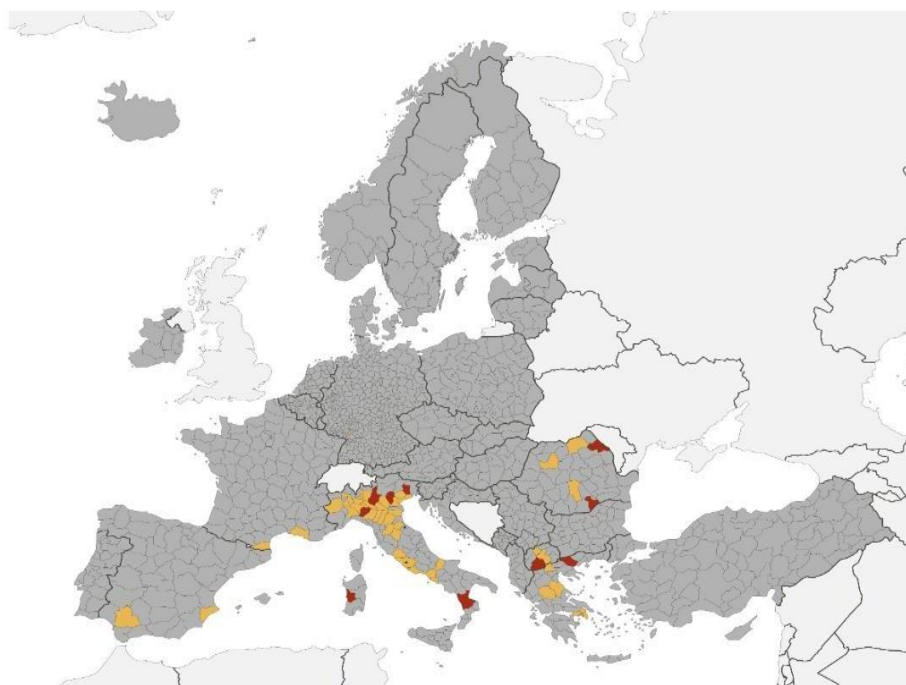
- Newly affected region
- Affected region
- No cases reported
- Not included

Countries not visible at the current scale



Liechtenstein

Malta



Administrative boundaries: ©EuroGeographics ©UN-FAO. The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union. Map produced by ECDC on 07 August 2026.
Created with data reported to EpiPulse Cases up until and including 2026-08-05.