

Results of the epidemiological wastewater surveillance of polioviruses in Slovenia

In 2024, Slovenia implemented epidemiological wastewater surveillance of polioviruses. Wastewater sampling is conducted quarterly at selected wastewater treatment plants, in accordance with the [Wastewater surveillance plan of polioviruses in Slovenia](#). The last confirmed case of poliomyelitis in Slovenia occurred in 1978. Therefore, the primary objective of epidemiological wastewater surveillance of polioviruses in Slovenia is to detect any potential reintroduction of polioviruses into the country.

Monitoring results

Table 1: Results of the epidemiological wastewater surveillance of polioviruses, Slovenia, 2026.

Composite sample (for the area)	Results		
	2 nd and 3 rd Mar 2026	1 st and 2 nd June 2026	7 th and 8 th Sept 2026
Central Slovenian region – Ljubljana ¹	negative	negative	negative
Central Slovenian region – other ²	negative	SL1* (WWTP Kranj)	negative
Primorska region ³	negative	negative	negative
Celje-Novo mesto region ⁴	negative	negative	negative
Eastern Slovenia region ⁵	negative	SL1* (WWTP Maribor)	negative

¹ WWTP Ljubljana; ² WWTP Domžale-Kamnik, WWTP Kranj, WWTP Trbovlje, WWTP Litija in Šmartno pri Litiji, WWTP Zagorje; ³ WWTP Koper, WWTP Nova Gorica, WWTP Postojna; ⁴ WWTP Celje, WWTP Šaleške doline, WWTP Novo mesto, WWTP Brežice; ⁵ WWTP Maribor, WWTP Murska Sobota, WWTP Slovenj Gradec.

Table 2: Results of the epidemiological wastewater surveillance of polioviruses, Slovenia, 2024-2025.

Composite sample (for the area)	Results							
	4 th and 5 th Mar 2024	3 rd and 4 th June 2024	2 nd and 3 rd Sept 2024	2 nd and 3 rd Dec 2024	3 rd and 4 th Mar 2025	2 nd and 3 rd June 2025	1 st and 2 nd Sept 2025	1 st and 2 nd Dec 2025
Central Slovenian region – Ljubljana ¹	negative	negative	negative	negative	negative	negative	negative	negative
Central Slovenian region – other ²	negative	negative	negative	negative	negative	negative	negative	negative
Primorska region ³	negative	negative	negative	negative	negative	SL3** (WWTP Nova Gorica)	negative	negative
Celje-Novo mesto region ⁴	negative	negative	negative	negative	negative	negative	negative	negative
Eastern Slovenia region ⁵	negative	negative	negative	negative	negative	negative	negative	negative

¹ WWTP Ljubljana; ² WWTP Domžale-Kamnik, WWTP Kranj, WWTP Trbovlje, WWTP Litija in Šmartno pri Litiji, WWTP Zagorje; ³ WWTP Koper, WWTP Nova Gorica, WWTP Postojna; ⁴ WWTP Celje, WWTP Šaleške doline, WWTP Novo mesto, WWTP Brežice; ⁵ WWTP Maribor, WWTP Murska Sobota, WWTP Slovenj Gradec.

Interpretation of results

The monitoring plan covers 16 major wastewater treatment plants (WWTP), representing 34.2% of Slovenia's population across all statistical regions. Microbiological analysis of wastewater samples **in September 2026 revealed no presence of polioviruses.**

* In the wastewater sample from the WWTP Kranj (from the composite sample for the Central Slovenia – Other area) and the wastewater sample from WWTP Maribor (from the composite sample for the Eastern Slovenia area), the presence of a Sabin-like type 1 (SL1) was confirmed in June 2026.

** In the wastewater sample from the WWTP Nova Gorica (from the composite sample for the Primorska region), the presence of a Sabin-like type 3 (SL3) was confirmed in June 2025.

Sabin polioviruses are used in oral polio vaccines (OPV). OPV is still widely used in national routine immunization programs in many countries outside of Europe, particularly in Asia and Africa. As a result, vaccine-derived Sabin and Sabin-like polioviruses can often be detected in the population and in wastewater in areas where OPV is used for routine immunization, or in wastewater from areas where individuals recently vaccinated with OPV—who may be shedding the virus—are or have recently been present. The detection of SL1 and SL3 in wastewater from the catchment areas of WWTP Kranj, WWTP Maribor and WWTP Nova Gorica does not pose a risk to public health, and no additional measures were necessary. However, it does demonstrate that Slovenia has a very sensitive and well-functioning system for epidemiological surveillance of polioviruses in wastewater.

Following the detection of SL1 in the catchment areas of WWTP Kranj and WWTP Maribor in June 2026, additional wastewater sampling was conducted on 8 June and 15 June 2026. In addition, following the detection of SL3 in the catchment area of WWTP Nova Gorica in June 2025, additional wastewater sampling was conducted on 17 June and 23 June 2025. The presence of polioviruses was not confirmed in any of these additional wastewater samples collected during the agile surveillance. This suggests that individuals vaccinated with OPV were no longer shedding the SL1 or SL3 virus in the catchment area of WWTP Kranj, WWTP Maribor and WWTP Nova Gorica or that such individuals were no longer present in this area.

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