Prevalence of Canine Circovirus (CanineCV or DogCV) in Hungary and the EU

Hungary

Specific data on the prevalence of Canine Circovirus in Hungary are limited. The most relevant information comes from a 2016 study conducted on domestic dogs. In this research, the virus was detected in **16% of dogs with gastrointestinal symptoms** and **8% of healthy dogs**. The difference was statistically significant, suggesting a possible association between the virus and gastrointestinal diseases, although it may also occur in subclinical form. The study examined samples from **shelter dogs** in Hungary and highlighted the **genetic diversity of the detected viral strains**.

No more recent comprehensive prevalence data (post-2020) are available for Hungary. A **2025 study** on virus monitoring in **wild carnivores** (e.g., foxes, jackals, wolves) did **not report detection of CanineCV**, focusing instead on other viruses such as canine coronavirus and picodistrovirus. It is possible that CanineCV was tested but found to be **not widespread** in these wild populations.

European Union (EU)

CanineCV has been detected in several EU countries since **1995**, with prevalence varying depending on the population (domestic dogs vs. wild carnivores), health status, and testing methods. In general, the **prevalence in domestic dogs ranges from 3.6% to 28%**, often higher in symptomatic animals (e.g., those with diarrhea or respiratory problems) than in healthy ones. The virus occurs more frequently in wild canids, where rates may be higher, suggesting that these populations could serve as **reservoirs**.

Key Studies and Data from EU Countries

Country	Population	Prevalence Rate	Details	Source Year
Germany	Domestic dogs with diarrhea	20.1%	Higher in symptomatic dogs; detected via PCR in fecal samples.	2017
Germany	Healthy domestic dogs	7.3%	Frequent subclinical presence; no significant clinical symptoms.	2017

Hungary	Domestic dogs with gastrointestinal symptoms	16%	Significant correlation with symptoms; part of a broad enteric virus survey.	2016
Hungary	Healthy domestic dogs	8%	Indicates endemic presence without symptoms.	2016
Italy	Gray wolves (wild)	47.8%	High across all age groups (50% pups, 42.9% young adults, 50% adults); genotypes 1 and 4 detected.	2025 (review)
Italy	Red foxes (wild)	0–4.3%	Low detection rate; varies by region and sample type.	2010s–2020s
UK & Norway	Arctic/red foxes (wild)	16.9–51.6 %	Genotype 5 dominant; higher in northern regions.	2020s
Spain	Iberian lynx (wild)	57.8%	Related novel circovirus (ILCV-1) detected in spleen samples, distinct from CanineCV.	2024

General Trends in the EU

- **CanineCV is endemic** but often **subclinical** among domestic dogs.
- **Higher prevalence** is seen in wild populations (foxes, wolves, badgers: 18–50%).
- **Genotypes 1, 4, and 5** are common in European strains, showing close genetic relatedness.
- **Coinfections** with other pathogens (e.g., canine parvovirus) are frequent and may worsen symptoms.
- **Data gaps** remain significant, as many studies target symptomatic or wild animals rather than broad population surveys.

Knowledge Gaps

There is **no comprehensive EU-wide epidemiological survey**. Most available data come from **Germany, Italy, Hungary, and northern countries**. Wild carnivores likely play a role in **transmitting the virus to domestic dogs**, especially in rural areas.