

DISEASES RELATED TO NATIVE WILDLIFE

Some infectious diseases present in the environment, specifically in wildlife, are transmitted to humans and are therefore likely to have an impact on their health. In Wallonia, these zoonoses include the following: multilocular echinococcosis, tularemia, leptospirosis, hantaviriosis, anaplasmosis and borreliosis.

Epidemiological monitoring in Belgium

In Belgium, the epidemiological monitoring of zoonoses is based on data from three microbiology laboratory networks¹ and mandatory reporting data². This monitoring is not exhaustive. In addition, many diseases have a clinical presentation that is often not very specific, and they are therefore probably under-diagnosed. Their actual impact is consequently underestimated. However, this monitoring makes it possible to follow trends over time.

Multilocular echinococcosis, tularemia and leptospirosis: rare zoonoses

Multilocular echinococcosis is a rare but potentially serious parasitic disease. In Belgium, the number of reported cases per year was 1 in 2010, 2 in 2011 and 2012, and 3 in 2013 and 2014. Currently, there is no significant increase in the number of cases, whereas such an increase is observed in Europe³. This is apparently due to an increase in fox density and the prevalence of the infection among foxes. Two other rare zoonoses are identified in Wallonia: (i) tularemia, for which 4 cases were reported between 2012 and 2014 and (ii) leptospirosis, for which an increase in the number of cases was observed in 2014 (18 cases), similar to France and the Netherlands.

Hantaviriosis and anaplasmosis: a stable situation

Hantaviriosis is an infrequent viral zoonosis. The number of reported cases fluctuates from year to year in Wallonia (44 in 2014) and does not appear to be increasing overall. This is also the case at European level⁴. As regards anaplasmosis, the situation also seems stable, with the total number of reported cases in Wallonia being 13 in 2013 and 7 in 2014.

Borreliosis: no significant increasing trend

Borreliosis (or Lyme disease) is a disease transmitted by ticks. The number of positive serological results reported by the sentinel laboratories in Wallonia varies considerably from year to year, depending in particular on climatic conditions and the density of ticks. There was a significant increase in 2013 and even more in 2014 (625 and 889 positive results, respectively). This corresponds to an increase in the number of serological tests carried out among the population, following increased vigilance with regard to the disease. At present, there is no significant trend towards an increase in the disease in Belgium.

[¹] Sentinel laboratories, reference laboratories and national reference centres | [²] For more information: <https://epidemiology.wiv-isp.be/ID/Pages/default.aspx> | [³] ECDC, 2014a | [⁴] ECDC, 2014b

Tab. HEALTH 5-1 Diseases related to native wildlife*

DISEASE	INFECTIOUS AGENT	CONTAMINATION ROUTE	REPORTED CASES/POSITIVE SEROLOGICAL RESULTS
Multilocular echinococcosis	Parasite (<i>Echinococcus multilocularis</i>)	Ingestion of parasite eggs (host animal: fox)	1 case reported in Belgium in 2010, 2 in 2011 and 2012, 3 in 2013 and 2014
Tularemia	Bacteria (<i>Francisella tularensis</i>)	Transmission mainly by direct skin contact (main carrier: hare) and tick bite	1 case reported in Wallonia in 2012, 1 in 2013 and 2 in 2014
Leptospirosis	Bacteria of the genus <i>Leptospira</i>	Contamination by direct contact (hosts: small rodents, cattle, goats, pigs, horses, dogs and cats) or indirect contact.	
Hantaviriosis	<i>Hantavirus spp.</i>	Inhalation of aerosol virus from rodent excreta	
Anaplasmosis	Bacteria (<i>Anaplasma phagocytophilum</i>)	Transmission by tick bite (main carrier: cattle, deer and rodents)	13 cases (confirmed or probable) reported in 2013 in Wallonia, 7 in 2014
Borreliosis (Lyme disease)	Bacteria (<i>Borrelia burgdorferi s.l.</i>)	Transmission by bites from certain types of infected ticks (of the genus <i>Ixodes</i>)	

* Diagnosed on Belgian territory

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