



Cryptosporidium spp. occurrence in Latvia

One Health Perspective

Transmission of Foodborne Parasitic pathogen from animals to humans: TRANSPAR” (Izp-2021/1-0055)

Gunita Dekсне^{1,2}, Maira Mateusa^{1,3}, Maija Rozenfelde¹

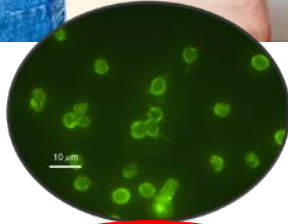
¹Institute of Food Safety, Animal Health, and Environment “BIOR”, Latvia

²University of Latvia, Faculty of Biology, Latvia

³Latvia University of Life Sciences and Technologies, Faculty of Veterinary Medicine, Latvia

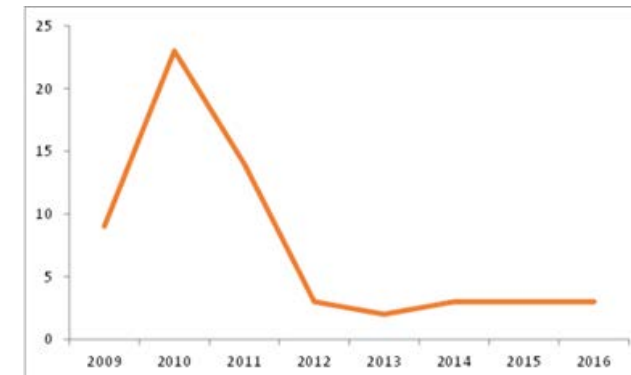
Gunita.deksne@bior.lv

Cryptosporidium infection source



Cryptosporidium human cases

		Cryptosporidium spp.		
Factor		No analysed	No. of infected	Proportion, % (95%CI)
Age group	0	123	4	3.3 (1.0 - 8.3)
	1-6	313	22	7.0 (4.6 - 10.5)
	7-14	108	6	5.6 (2.3 - 11.8)
	15-17	40	3	7.5 (1.9 - 20.6)
Gender	Female	268	11	4.1 (2.2 - 7.3)
	Male	316	24	7.6 (5.1 - 11.1)
Total		584	35	6.0 (4.3 - 8.1)



Officially reported cases in Latvia

2019/2020/2021 yr – 3; 2; 3 cases

Overall, within 20 yr period – 71 cases



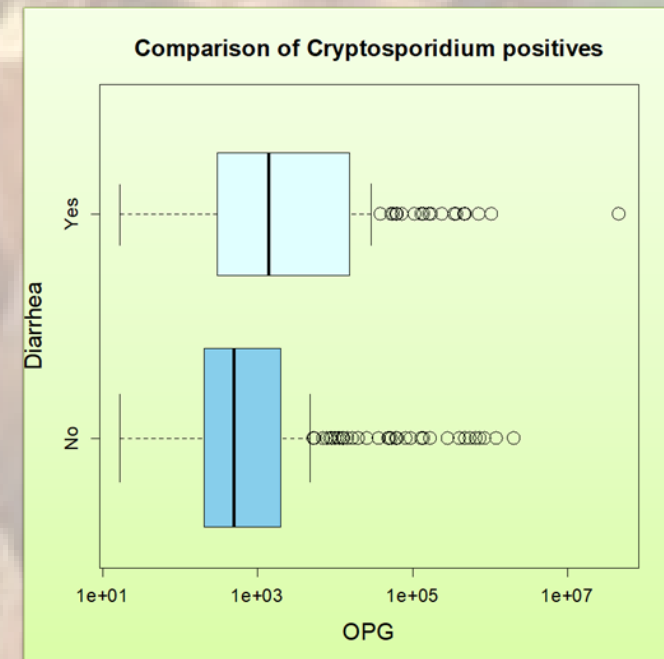
Article

Occurrence of *Cryptosporidium* spp. and *Giardia* spp. Infection in Humans in Latvia: Evidence of Underdiagnosed and Underreported Cases

Gunita Dekšne ^{1,2,*}, Agris Krūmiņš ³, Maira Mateusa ^{1,4}, Vladimirs Morozovs ⁵, Dārta Paula Šveisberga ^{1,5}, Rita Korotinska ⁶, Antra Bormane ⁶, Ludmila Viksna ⁵ and Angelika Krūmiņa ^{1,5}

Cryptosporidium in cattle

- Prevalence 33.8% (926; 95% CI 31,0-36,9), in 77.8% herds at least one shedding animal detected
- Intensity 200-45 423 600 oo/g
- *C. parvum* (IIaA15G2R1) the most prevalent species



Veterinary Parasitology: Regional Studies and Reports

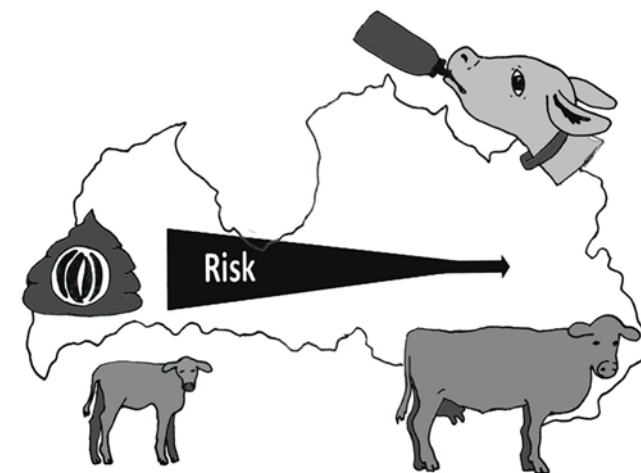
Volume 28, February 2022, 100677



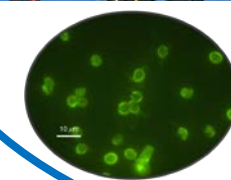
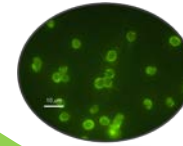
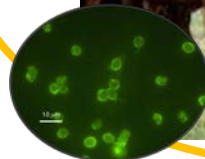
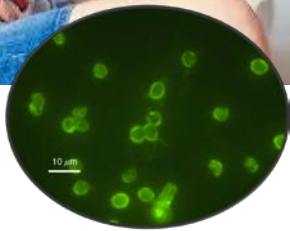
Original Article

Prevalence, risk factor and diversity of *Cryptosporidium* in cattle in Latvia

Gunita Dekšne ^{a, b}, Maira Mateusa ^{a, c}, Svetlana Cvetkova ^a, Alīna Derbakova ^c, Dace Keidāne ^c, Karin Troell ^{d, e}, Gereon Schares ^f



Cryptosporidium infection source



19th Workshop of the National Reference Laboratories for Parasites
6-7 November 2024



**THANK YOU FOR
YOUR ATTENTION!**



Acknowledgments: Maija Selezņova, Lelde Šuksta, Anastasija Ahadova, Melisa Upeniece, Margarita Terentjeva and many others who participated in the different parts of the study.

This research was funded by the Fundamental and applied research “Transmission of Foodborne Parasitic pathogen from animals to humans: TRANSPAR” (Izp-2021/1-0055).

