



Ss. Cyril and Methodius University in Skopje
FACULTY OF VETERINARY MEDICINE – SKOPJE
Laboratory for parasitology and parasitic diseases



18th Workshop of the National Reference Laboratories for Parasites
16-17 November 2023

Trichinellosis in N.Macedonia

Human cases of *Trichinella*

Year with positive cases	1985	1992	1996	2001	2008
No. of positive human cases	3	6	2	1	1

There is no presence of *Trichinella* in domestic pigs intended for human consumption.

T.britovi – the only identified species in wild boars

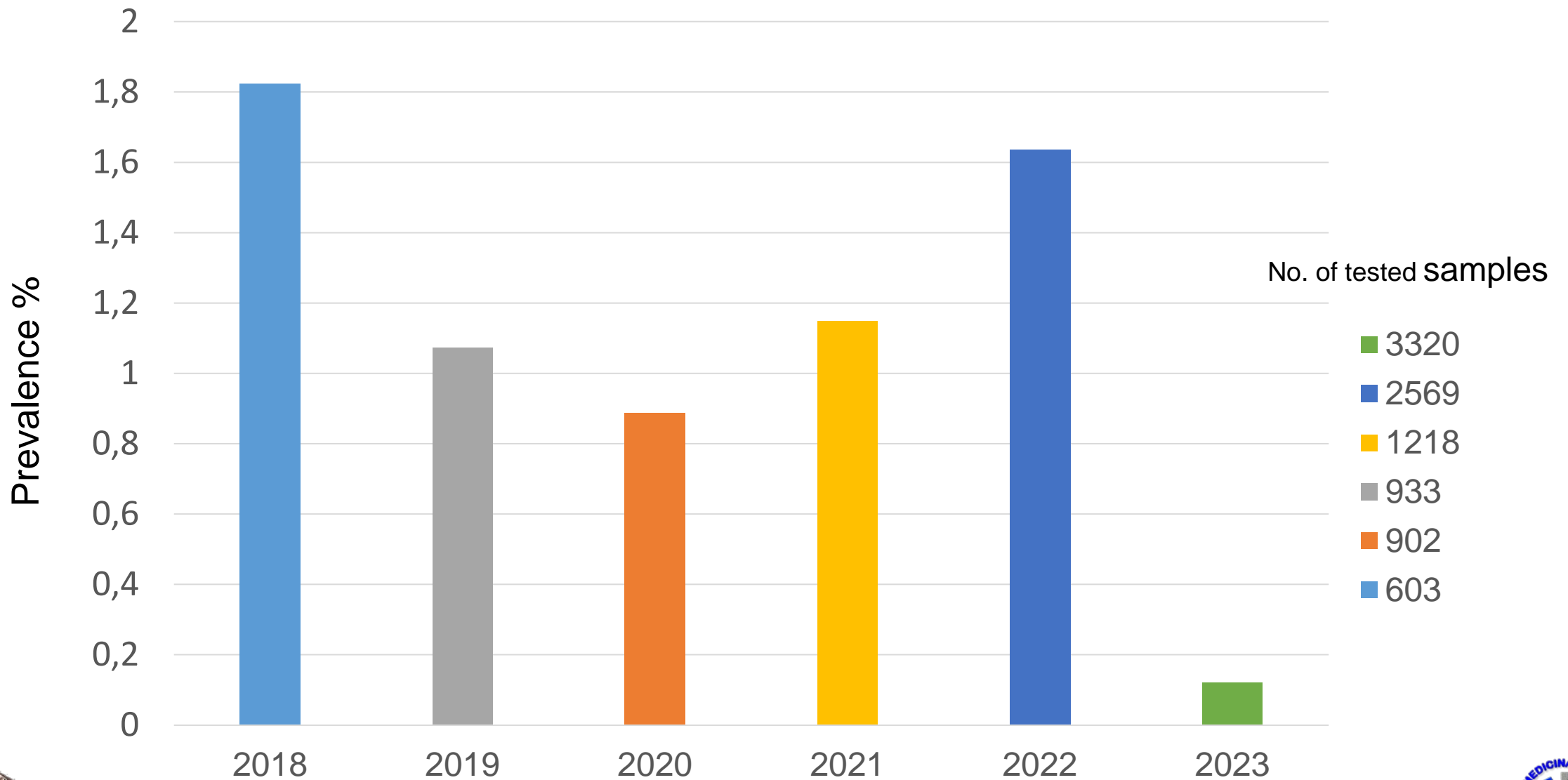
4 accredited laboratories, 3 in the slaughter houses and 1 private laboratory out of the slaughter house.

Accredited method: SOP 619 Detection of *Trichinella* larvea in meat with magnetic stirrer method for pooled sample digestion (MKC EN ISO 18743:2015)



*Prevalence of *Trichinella* spp. infection in wild boars*

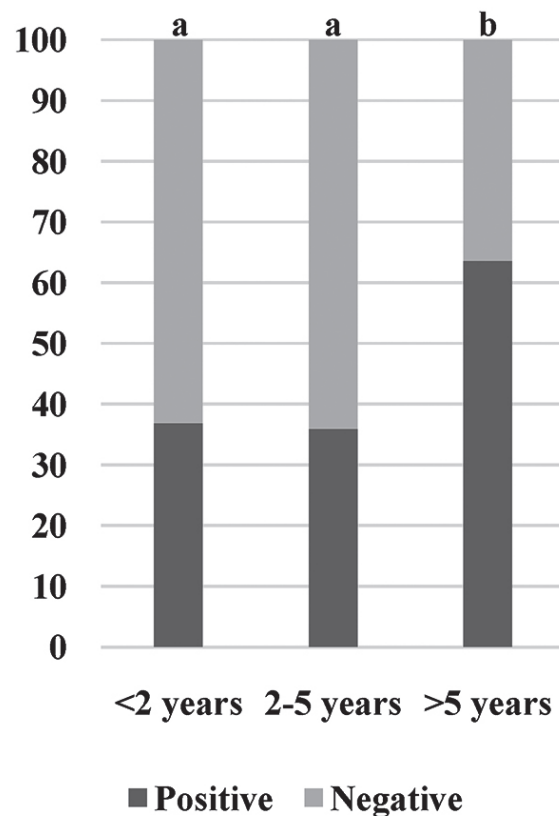
(2018-2023)



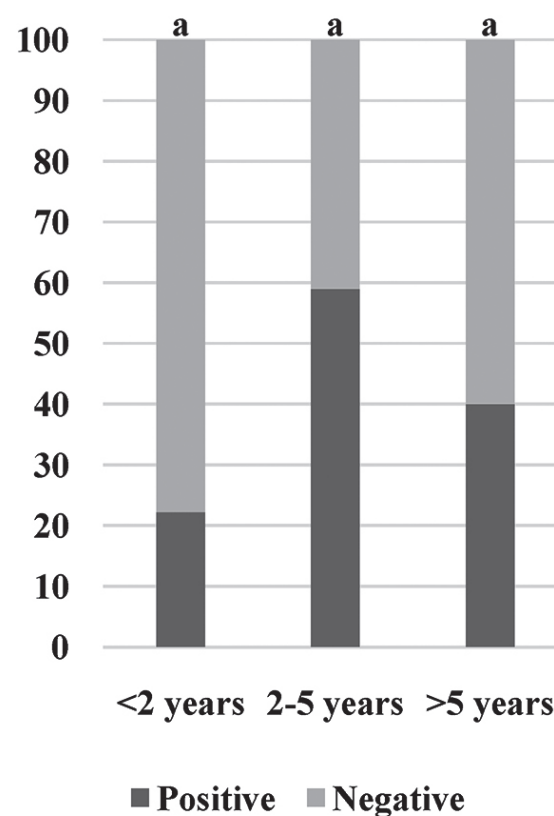
Prevalence of cystic echinococcosis in slaughtered cattle and sheep

Overall prevalence of *E. granulosus s.l.* at slaughterhouse is **60% in cattle and sheep**

A



B



Ratios of positive/negative specimens (liver and lungs) for echinococcosis by age groups in cattle (A) and sheep (B). Significantly different values between the age groups are marked with different letters (a, b)



Macedonian Veterinary Review

sciendo

Mac Vet Rev 2022; 45 (1): 35-41

Available online at
www.macvetrev.mk

Original Scientific Article

CYSTIC ECHINOCOCCOSIS IN SLAUGHTERED CATTLE AND SHEEP FROM NORTH MACEDONIA

Ljubica Rashikj¹, Aleksandar Cvetkovikj¹, Martin Nikolovski²,
Iskra Cvetkovikj¹, Jovana Stefanovska¹

¹Veterinary Institute, Faculty of Veterinary Medicine - Skopje, Ss. Cyril and Methodius University in Skopje, Lazar Pop-Trajkov 5-7, 1000 Skopje, North Macedonia

²Institute for Reproduction and Biomedicine, Faculty of Veterinary Medicine - Skopje, Ss. Cyril and Methodius University in Skopje, Lazar Pop-Trajkov 5-7, 1000 Skopje, North Macedonia

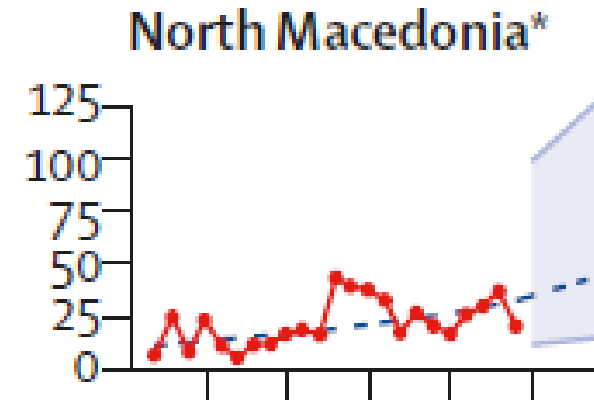
Received 20 October 2021; Received in revised form 2 December 2021; Accepted 10 December 2021



Human cystic echinococcosis in N.Macedonia

HIGLY ENDEMIC

- **538 cases** (1997-2021)
- **1,652 hospitalizations** (2008-2021)
- **22 deaths** (CFR: 5.3%)
- Incidence **1.08/100k** (1997-2020)
- Incidence **1.41/100k** (2017-19)



THE LANCET Infectious Diseases

Available online 22 November 2022

In Press, Corrected Proof ?

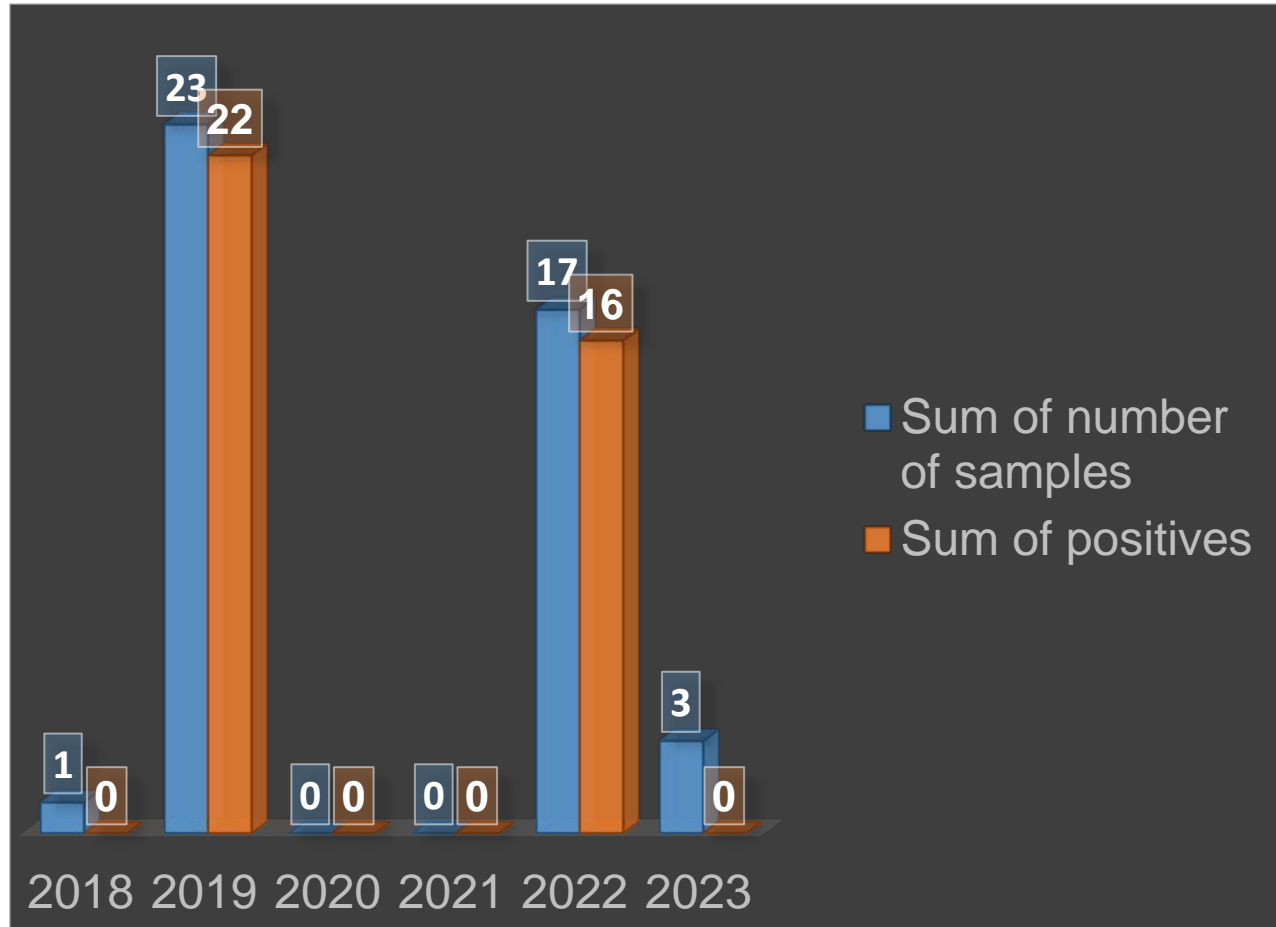


Review

Unveiling the incidences and trends of the neglected zoonosis cystic echinococcosis in Europe: a systematic review from the MEmE project



Anisakis

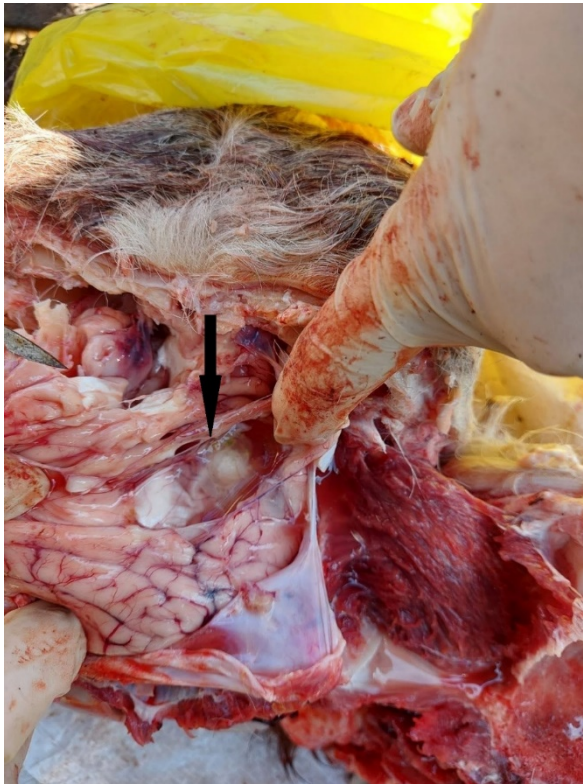


Samples provide by the
official veterinary inspector -
Imported frozen fish (hake)

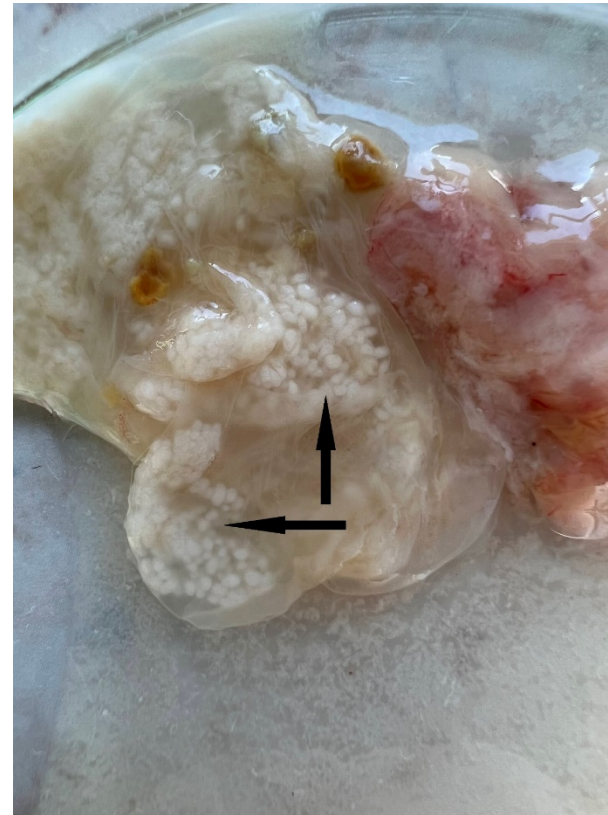
Accredited method: SOP 872 ver. 1 Microbiology of the food chain - Methods for the detection of Anisakidae L3 larvae in fish and fishery products - Part 2: Artificial digestion method (MKC EN ISO 23036-2:2021)



First report of bovine coenurosis in North Macedonia



Coenurus cyst (arrow) in the central part of the left cerebral hemisphere



Clusters of protoscoleces (arrows) attached to the thin membrane of the cyst



Thank you for your attention



Dear parasites!

I hope we will
evolve faster
than the
parasitology
science

