

The necessity of monitoring rodent helminth communities in light of the One Health approach

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1.

Background

Rodents commonly live near humans and domestic animals, and are well known natural reservoirs of zoonoses, including those caused by helminths. Climate changes can lead to zoonoses in previously non-endemic areas or in previously uninfected host species.

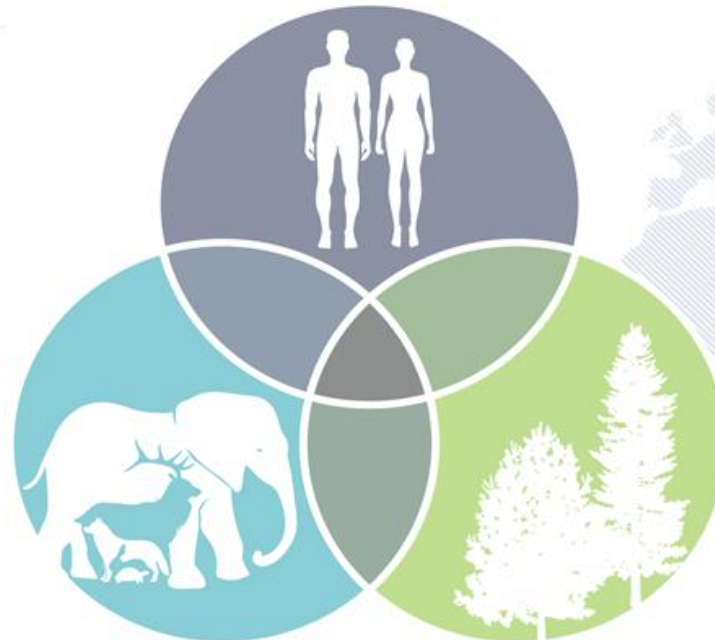
Material and Methods

2.

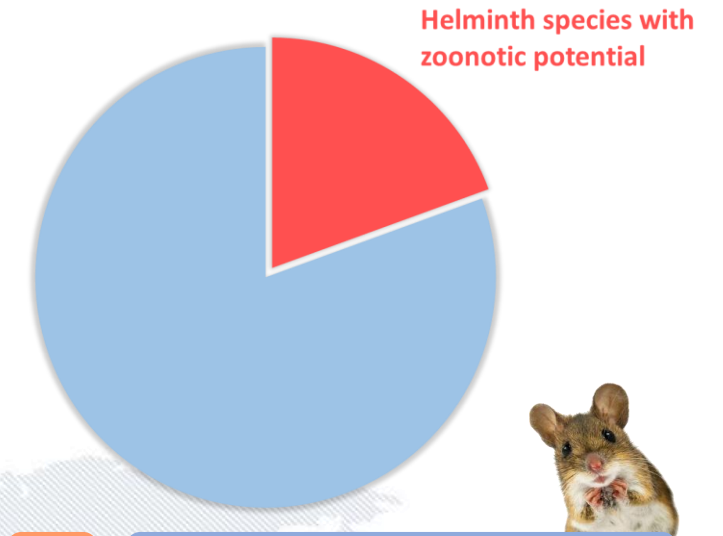
Host samples were collected in areas where humans and domestic animals can encounter infected animals or a contaminated environment, leading to pathogen transmission.

Results

Seven of 36 identified helminth species have confirmed zoonotic potential: *Mesocestoides lineatus*, *Hymenolepis diminuta*, *H. nana* (*fraterna*), *Taenia martis*, *Hydatigena taeniaeformis*, *Calodium hepaticum* and *Moniliformis moniliformis*.



3.



4.

Conclusion

The encroaching of human settlements into natural habitats, coupled with climate change, leads to parasites invading new hosts, including humans. That necessitates regular monitoring of rodent populations, the parasites they carry, and their environment.