

EVALUATION OF THE PRESENCE OF BACTERIA OF CLINICAL IMPORTANCE IN CASES OF INTESTINAL INFECTIONS IN SAMPLES COLLECTED FROM MARINE ANIMALS OF MIGRATORY HABITS BETWEEN 2018 AND 2019 IN BRAZIL

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ABSTRACT:

Throughout Brazil, coastal and river environments have been affected by anthropic activities, such as port, agricultural and urban effluent discharges. Waste released into marine and river ecosystems can contaminate the fauna that lives and / or migrates through these regions. In this way, the conservation of species is compromised, as well as human health is affected, as well as promoting socioeconomic losses, such as those involving fishing and tourism. The objective of this work was to evaluate the role of fish, turtles, seabirds and cetaceans, resident and of migratory habits collected in several Brazilian regions as reservoirs of pathogens at Enteropacteriaceae, Vibrionaceae and Aeromonadaceae families and their implications for public health. A total of 399 swabs were collected from October 2018 to April 2019, comprising 85 of *Sula leucogaster*, 71 of *Rhizoprionodon porosus* and *R. lalandii*, 57 of *Nannopterum brasiliense*, 55 of Ariidae, 28 of *Spheniscus magellanicus*, 26 of *Chelonia mydas*, 25 of *Haematopus palliatus*, 20 of *Cichla ocellaris*, 19 of *Arctocephalus australis* and 13 *Puffinus puffinus*, and received by LRNEB / IOC / FIOCRUZ to evaluate the bacterial species present through phenotypic identification. In general, the regions with the highest sample isolation were the South (51%) and the Southeast (42.3%). As for bacterial isolates, the species with the highest prevalence was *Vibrio* spp. with 97 isolates followed by *Escherichia coli* with 76 isolates and *Aeromonas* spp. with 21 isolates. The isolates of *Vibrio* spp. were predominantly found in Ariidae (40/97) and *S. leucogaster* (11/97). *Escherichia coli* isolates had a higher prevalence in samples collected from *N. brasiliense* (22/76) and *S. leucogaster* (20/76). Isolates from *Aeromonas* spp. were detected mainly in Ariidae (13/21) followed by *S. leucogaster* (5/21). Serovars of *Salmonella* spp. no were isolated. The presence of isolates of different bacterial species of relevance in public health has a role in the maintenance and dissemination of pathogenic strains by different geographic regions. The evaluation of the potential of transfer of microorganisms to the human population and other animals, through the consumption of fish and / or contact with animals of migratory habits, is also relevant as a form of control and prevention of colonization and / or contamination by these microorganisms.

Keywords: animals of migratory habits, coastal marine ecosystems, enteropathogens